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ABSTRACT

To determine the effectiveness, feasibility, and desirability of providing rehabilitation services to the adult deaf in a residential facility for handicapped hearing persons, 131 deaf clients were studied during 3 years. Forty were multiply handicapped while the majority were underachievers. The program was viewed as only desirable to a degree due to a lack of specialized staff and too little individual instruction in vocational skills. During the 3 years, 57 students completed training while 46 terminated before completion; 85% of the total were judged to have made worthwhile personal, social, and vocational gains, but most did not appear to benefit to the extent of their capabilities. Services for the deaf were considered feasible for the length of the study, but questions were raised concerning permanent continuation. The deaf were often short-changed as a result of communication difficulties. Additional data and conclusions are presented. (RJ)

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AN EXPERIMENT IN SERVING DEAF ADULTS IN A COMPREHENSIVE REHABILITATION CENTER

Gary D. Blake

Hot Springs Rehabilitation Center
Hot Springs, Arkansas

ARKANSAS REHABILITATION SERVICE

STATE BOARD FOR VOCATIONAL EDUCATION

Final Report
Project RD-1932-S

EC 031 960E

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FINAL REPORT
OF A
RESEARCH AND DEMONSTRATION PROJECT

"A DEMONSTRATION TO DETERMINE THE EFFICACY OF PROVIDING REHABILITATION SERVICES TO THE ADULT DEAF IN AN ONGOING, COMPREHENSIVE REHABILITATION FACILITY FOR HANDICAPPED HEARING PERSONS"

August 1, 1965 - May 31, 1968

By

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SIGNIFICANT FINDINGS FOR REHABILITATION WORKERS

The rehabilitation needs of most deaf persons are not greatly unlike those of many other rehabiliation clients. However, non-specialized rehabilitation workers usually fail to recognize their needs and they are not aware that the service methodologies with which they are familiar are inappropriate for the deaf.

The majority of clients served in this project were of average or better general intelligence, but they were low achievers. Many were multiply disabled. Ten percent were totally illiterate and another 62% were functionally illiterate (at or below the fourth grade language level as measured by standardized academic achievement tests.) They were limited in their knowledge of the world about them; gross developmental lags were evident; they lacked readiness for independent living responsibilities.

Many of the deaf clients referred to the Center during the tenure of this project were among the field counselors' most difficult cases. If they could have served them elsewhere they probably would not have referred them to the Center.

Deaf persons require a thorough pre-enrollment orientation relative to what they might expect during a program of services in a comprehensive rehabilitation center. Rehabilitation field counselors should understand, and should impress upon their deaf clients, that evaluation and training programs for them in a comprehensive rehabilitation center usually involve more time for completion than would be needed by hearing persons.

Low achieving, often multiply disabled deaf persons, in most instances, require intensive job orientation, and extended periods of personal, social, and work adjustment training, and basic education intruction prior to formal vocational evaluation and vocational training services.

Communication difficulties, involving lack of "in depth" understanding of the deaf as well as the inability to use sign language and finger spelling, permeats and often negates the efforts of non-specialized rehabilitation personnel to serve the deaf. As a result, deaf clients are often short-changed in many services they receive.

Communication between deaf clients and rehabilitation personnel must be assured by having specialized personnel provide the service, or by providing training for non-specialized personnel to a level where services can be offered without communication gaps, or by providing interpreting services. Note-taking services are inappropriate for the majority of the type deaf client served in this study.

Counseling, evaluation, basic education, vocational training, vocational tutoring, and interpreting are rehabilitation services which should be provided only by personnel who have been prepared especially for the application of these professional services to deaf persons. Ideally, all services will be provided by persons who are both competent in their respective fields and capable of communicating in depth with the deaf.

Counselor-student ratios in the Center were much too high, at times 1 to 40. Due to the type deaf clients served in this study and to multiple responsibilities of the counselor in case coordination, case managment and personal, social, and vocational counseling, a ratio of 1-15 is considered maximum for the provision of effective services. Staff-student ratios for the basic education instructor and vocational tutor should be no higher than 1 to 6 per session; the needs of the clients often require a one to one or 1 to 3 ratio. For vocational evaluation services, a 1 to 5 ratio is considered maximum if highly meaningful results are to be obtained.

The employment of capable deaf persons in the Center program was highly effective. Inconveniences in communication between hearing and deaf staff members were more than offset by the increased effectiveness of services for the deaf.

Extensive and continuous in-service training is needed for regular center staff members to provide them with the knowledge and skills needed to become effective in the provision of their services to deaf clients.

Rehabilitation counselors should carefully evaluate the service and staffing patterns of facilities which are being considered for their deaf clients to determine whether the needs of these clients can be met. Centers with no special provisions of staff or services for deaf persons generally should be avoided if possible.

The placement of deaf persons in employment, subsequent to their completion of formal training programs, should entail considerable action on the part of rehabilitation counselors. Counselors for these deaf clients must accept placement responsibilities.

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ABSTRACT

This project was conducted to determine, insofar as possible, the effectiveness, the feasibility, and the desirability of providing rehabilitation services to adult deaf persons in an ongoing, residential comprehensive rehabilitation facility for handicapped hearing persons.

The Hot Springs Rehabilitation Center, operated by the Arkansas Rehabilitation Service, was the project site. This Center, with an average daily enrollment of approximately 450 students offers a variety of services in three basic areas - evaluation, training, and medical.

The 131 deaf persons who comprised the project clientele were referred by 60 rehabilitation counselors from ten states. Some forty of these deaf persons were multiply disabled individuals; the majority were underachievers.

A number of deaf persons realized benefits through participation in the project. They were enhanced socially, vocationally, medically, and in other ways. Counselors were generally pleased as were the parents of the clients. It can be stated, therefore, that the program was desirable, effective, and feasible to an extent.

However, the lack of adequately trained staff persons coupled with the communication difficulties of the deaf, created some severe problems for project personnel.

In view of these problems, two possibilities are believed to exist for serving the deaf - substantially modify the services and staffing patterns of existing centers to more adequately meet their needs or establish rehabilitation facilities designed exclusively for them.

CHAPTER I

INTRODUCTION

Background, Including Review of Relevant Literature

Since the first year of its operation (1961), the Hot Springs Rehabilitation Center, a comprehensive rehabilitation center operated by the Arkansas Rehabilitation Service, has accepted deaf rehabilitation clients for services. From the opening of the Center in 1961, to January, 1964, from one to a half-dozen deaf students were in enrollment at all times. However, neither special service innovations nor specialized staff were introduced to serve them. Center personnel recognized that due to communication difficulties and the lack of staff understanding of their needs, the services to deaf clients were not entirely meaningful.

The administration of the Arkansas Rehabilitation Service (ARS) and the staff of the Agency research section which existed during the early 1960's had been interested for a number of months in a formal investigation of providing rehabilitation services to deaf clients at the Center. Consequently, the ARS decided to initiate, under its own auspices, a pilot study at its Hot Springs Rehabilitation Center to determine the feasibility, insofar as possible, of meeting the rehabilitation needs of deaf people in a large, comprehensive rehabilitation center for handicapped hearing persons. The ARS pilot study commenced on January 4, 1964, and concluded on July 31, 1965. Although the pilot study was financed by ARS, it included a provision for payment of the entire cost of Center services for out-of-state clients. This was done to increase the size of the population for study since the population of Arkansas deaf persons is relatively small. At the outset of the pilot study, regular Center staff received instruction in manual communication* and orientation to the problems often encountered by deaf individuals. The only modification of the regular service program was the employment of one specialist experienced in the education of the deaf and skilled in manual communication to act as a consultant to the Center staff, and when "absolutely necessary," as an interpreter for staff and deaf students. However, the consultant interpreted on a consistently increasing basis for the regular Center counselors, and it was felt that he may as well be providing the service directly. Therefore, after four months he became the assigned Center counselor for all deaf students. During the pilot study, approximately 40 clients from eight states, most of them deaf but a few of them hard of hearing, were served. The results of the eighteen month pilot study were quite revealing. They exposed obvious weaknesses in the existing service program so far as serving a large number of deaf clientele was concerned, and numerous questions were raised regarding the feasibility of integrating deaf rehabilitation clients into an already existing comprehensive rehabilitation facility for handicapped hearing persons. It was determined that a larger sample of deaf clients, innovations in the existing service program, the addition of specially trained staff, and an extended period of time were necessary to allow a more definite and conclusive study of the feasibility of integrating deaf adults into such centers.

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*sign language and finger spelling.

To investigate post-school rehabilitation service needs of deaf adults, VRA Project Number RD-1652, "A Study of the Occupational Status of the Young Adult Deaf of the Southwest and the Need for Specialized Vocational Rehabilitation Facilities", was conducted in a seven state area. It was a companion project to a similar survey conducted in the New England States by the American School for the Deaf (RD-12[illegible]-S). The two surveys provided a substantial contribution to the body of knowledge concerning the social, economic, and vocational status of young deaf adults. The Southwest study revealed that from two to three hundred young deaf adults in the area were in immediate need of intensive and extensive post-school services such as are provided in a comprehensive rehabilitation center. Approximately 80 percent of the young deaf adults surveyed had an overall academic grade achievement level of grade six or below; 31.5 percent of them were found to be unemployed; opportunities for advancement for the employed young deaf adults were extremely limited; and there was a great deal of evidence substantiating general underemployment of young deaf adults. With the exception of two or three small programs in rehabilitation facilities (one of them the Hot Springs pilot program), deaf persons seeking post-school training could not expect to receive special assistance from professional persons prepared to work with the deaf in any of the existing vocational, technical, or special trade schools in the seven states included in the survey.

At the time of the inception of this project, it was noted that most residential schools for the deaf provided some vocational training for their students. However, it was known that, generally, such training courses were limited, and that graduates of schools for the deaf needed further preparation for competitive employment. Consequently, state vocational rehabilitation agencies were called upon to provide pre-vocational evaluation, counseling and guidance, training and a multitude of other services to these graduates and to the inevitable dropouts from schools for the deaf. These state agencies experienced severe difficulty in locating either public or private trade and technical schools with qualified instructional staff to provide effective employment training for the deaf. Many training institutions and even rehabilitation facilities were reluctant to accept deaf persons, as they realized they were not properly staffed to deal with the peculiar problems of the deaf.

It was known that suitable on-the-job training opportunities were difficult to find. The apparent reason for these difficulties was the inability of most hearing people to communicate with the deaf trainee efficiently and effectively. Even when training opportunities presented themselves readily, experience showed that deaf trainees often did not attain the degree of skill needed for successful job placement.

Because of the foregoing problems and limitations, state vocational rehabilitation agencies, it was found, were actively seeking ways to utilize comprehensive rehabilitation center setting:

(1) Guidelines for the Establishment of Rehabilitation Facilities for the Deaf, a report based on a conference conducted at Fort Monroe, Virginia, October 12-15, 1959. This conference convened to deal with specific problems indicated as follows: "As of now the combination of the peculiar needs of unadjusted deaf people and a void of resources to meet them thwart the efforts of rehabilitation counselors to plan for and serve effectively large numbers of their deaf clients." The conference provided detailed recommendations relating to the need, the program, the physical plant, the staff, community relationships, and financing of rehabilitation facilities for the deaf. However, the conference labored under the

disadvantage of a lack of "incontrovertible research findings" and "without the benefit of example or prototype for guidance."

(2) Research Needs in the Vocational Rehabilitation of the Deaf, a special report based on a conference conducted at Gallaudet College, Washington, D. C., June 19-22, 1960. A purpose of this conference was to "identify important research problems in the vocational rehabilitation of the deaf, and their relative priorities." The conference report is described as "the single most effective repository of the experience generated by the conferees". One chapter of the report gave priority to the following research needs: criteria of vocational success and satisfaction; development of measuring instruments; vocational counseling services; and demonstration vocational high schools.

(3) A Personal Adjustment and Prevocational Center for Non-feasible Deaf Adults and Research to Discover and Establish: (1) The Extent to Which Vocational Rehabilitation Can Be Achieved; (2) The Time Required; and (3) the Cost, Project RD-801, conducted in East Lansing, Michigan, September, 1962, to April, 1964. The purpose of this project was to establish a prevocational program for deaf men who had been rejected for services as "non-feasible" by the state rehabilitation agency in Michigan due to disabilities other than deafness.

(4) Integration and Development of Services For the Deaf in A Comprehensive Vocational Evaluation and Work Conditioning Center, Project RD-1304, conducted in Boston, Massachusetts; and Demonstration of Methods of Serving Deaf Adults In a Comprehensive Vocational Evaluation and Work Conditioning Center, RD-1571, also conducted in Boston. These two studies were related, the former being a six months pilot study to develop the proposal for the latter project. These studies recognized communication as a major difficulty in providing an adequate rehabilitation program for deaf persons and also suggested that the program for deaf persons within an ongoing rehabilitation facility should emphasize social and personal adjustment. It was also demonstrated that existing facility procedures should be changed to meet the needs of deaf clients.

Other reports containing similar suggestions, findings, recommendations, and ideas are contained in the bibliography to this report.

It was known that comprehensive rehabilitation centers offered a wide choice of vocational training areas which were characterized by flexibility of curricula and individual instruction. More importantly, they could simultaneously give a number of psychosocial services which have great potential in facilitating the vocational preparation and adjustment of the deaf.

Administrative personnel of the Arkansas Rehabilitation Service, realizing the problems encountered in fulfilling the special needs of deaf clients, therefore became interested in conducting a special research and demonstration project at the Agency's comprehensive rehabilitation center in Hot Springs. Approval and funds for the project evolved and on August 1, 1965, it became operative.

The Problem

The motivation for undertaking this study came from the urgent need for, but near total lack of, post-school vocational preparation resources where deaf persons could receive assistance from professional persons trained to serve them. Some experienced professionals strongly urged that separate post-school training facilities be established solely for deaf adults. On the other hand, many believed that it was difficult to adequately prepare deaf persons for integrated community living and work responsiblities in a segregated environment and that an integrated training setting was to be preferred. One type of available resource, the large, residential, comprehensive rehabilitation center, had never been systematically explored to determine its service capabilities for deaf persons.

Among the questions posed for integrated services were: Can a large comprehensive rehabilitation facility provide effective and desirable services to deaf adults?; If not, why not?; and, If so, what staffing and service innovations are needed, if any, to render the program effective? A demonstration project would allow some investigation of the response to the availability of a comprehensive rehabilitation facility program on a regional basis. The degree to which professionals, deaf adults, and the deaf persons' families would support the program was of critical importance. A final benefit of such a study would be to permit identification of the research and instructional materials needs to serve deaf adults.

The purpose of this study, simply stated and simply designed, was to determine whether deaf persons could receive effective rehabilitation services in a setting where they were integrated with handicapped hearing persons and whether such a program would be utilized by those needing the service.

Disconcerting to those who for years had seen the urgent need for improved and expanded post-school services to deaf people, but a necessary part of the project, was the plan to alter the ongoing facility program as little as possible. A major question was: Could deaf persons benefit from the services already available with a minimum of special staffing and service considerations?

It was anticipated that the project would provide a laboratory for study and investigation of specific aspects of admissions procedures, prevocational evaluation, preemployment adjustment training, vocational training, counseling, psychosocial adjustment, and placement as they apply to deaf adults. At the time the project began, there was considerable feeling for the establishment of several regional rehabilitation centers for the deaf. It was anticipated that the project might result in important information as to the development of such centers.

The Setting

The Hot Springs Rehabilitation Center, a comprehensive rehabilitation facility operated by the Arkansas Rehabilitation Service, was inaugurated in 1960, in property which was formerly an Army and Navy General Hospital, and which was given to the State at that time through special Congressional action. Since its beginning ten years ago, this Center has provided services to almost 6,000 disabled persons, not only from Arkansas, but from other states as well. It currently has an average daily enrollment of approximately 450 students.

The property, dominated by a ten story main building, covers twenty acres and includes forty-six other buildings totaling approximately one-half million square feet of floor space.

The Center has a staff of over two hundred persons including counseling, medical, psychological, instructional, clerical, food service, custodial, occupational therapy, speech therapy, nursing, evaluative, administrative, and other personnel.

Most of the supervisory and professional staff are trained at the master's level in their particular specialty, and the group as a whole has come to be recognized as eminently capable.

Center services include:

- *Evaluation* - physical, medical, psychological, social, and vocational;
- *Medical Services* - medical supervision, medical consultation, psychiatric consultation, physical therapy, occupational therapy, speech therapy, audiological services and prosthetic and orthotic clinics;
- *Social and Psychological Services* - personal adjustment counseling, social casework, recreation, religious activities, and dormitory supervision; and,
- *Vocational Services* - vocational counseling, prevocational experience, special education, vocational training in 23 areas within the Center, and, when necessary, on-the-job training in other service occupations.

A division of the Arkansas Rehabilitation Service Research and Training Center is located in the facility and is responsible from time to time for special training and service programs.

This truly comprehensive center has an atmosphere which, at the time of the inauguration of this project, had never been systematically studied with relation to a substantial number of deaf clients. It was deemed, therefore, to be an excellent setting for the operation of the project.

Another facility operated by the Arkansas Rehabilitation Service was utilized for project purposes. This facility, the Audiology Center on the grounds of the Arkansas School for the Deaf in Little Rock, offered services for deaf persons. This facility housed a certified audiologist and speech therapist as well as a rehabilitation field counselor who worked exclusively with deaf and hard of hearing clients. The facility included a testing suite which contained a full complement of psychoacoustical equipment. Services of this Audiology Center were utilized for some project clients.

CHAPTER II

METHODOLOGY

The Project Staff

It was proposed that seven persons comprise the staff for the operation of this project. A listing and description of these positions follow:

Project Director - to assume administrative responsibility for operation and implementation of total project;

Project Coordinator-Counselor - in addition to coordinating all aspects of the project and preparing necessary reports, to assume counseling duties and operational responsibilities within the counseling section;

Psychometrist-Evaluator - to assume the responsibility for establishing a profile of information on each incoming student; to assist with psychological examinations, work-sample testing and other evaluation techniques;

Counselor - to provide personal, social and vocational counseling and to serve as case manager and program coordinator for each project client;

Counselor-Aide - to assist project counselors in the discharge of their duties; to assist with group seminars; and,

Two Secretaries - to perform the vital clerical functions, including records and data maintenance, necessary to the project.

All project staff members were assigned the responsiblity of relating the project to the overall Center environment. The promotion of manual communication among Center staff and students was also emphasized as an auxiliary project staff duty.

The project staff maintained dual responsibilities as project staff and as functioning members of the sections to which they were assigned. As functional members of the Center staff, they were under the supervision of Center section heads. In project matters they were supervised by the project coordinator-counselor. All were ultimately responsible to the Project Director.

An Advisory Committee was named to meet periodically to review project accomplishments and problems, and to make suggestions relative to these. Also, a planning session at the outset of the project was conducted for referral agency personnel. Experience from the pilot study indicated that referral agency personnel should have the opportunity of obtaining first hand information regarding the Center operation and the particular program with which their clients might be associated.

The Project Program

A flexible program was outlined for this project and some general guidelines were developed for use by project staff members. The program is described briefly in the ensuing paragraphs.

All applications for admission to the Center were reviewed by the existing Admissions Committee and the project coordinator-counselor. The basis for selection was project criteria and established standards of the Center. Meetings were held weekly to review applications, and the committee notified the sponsors within five days whether the application had been approved, denied or deferred for additional information.

Prepared materials outlining information and records needed by the Admissions Committee were distributed to the appropriate referral sources.

The clientele for this project were received in a manner which was designed to circumvent communication problems. Each project client was assigned to the counselor for the deaf who was responsible for coordinating the client's program, and also providing personal, social and vocational counseling. During the first week the client received a complete physical examination and underwent a detailed orientation to acquaint him with the physical plant, the Center program of services and regulations, and policies relating to students.* The orientation process for project clientele was more detailed than that given other incoming students, with project personnel taking the responsibility for seeing that the activities were meaningful to them. It was also their responsibility to see that the project clientele were kept informed of changes in policies and student rules throughout their various Center programs.

Housing was dormitory style with two or three students generally assigned to each room. A housemother was assigned to supervise each dormitory area. Room assignment policy was such that no two deaf clients were roommates. All communications regarding project clientele were channeled through the project counselor. Program scheduling, dormitory assignments, and recommendations for discipline were also among the counselor's responsibilities.

Students were engaged in scheduled activities from 8:30 a.m. until 4:30 p.m., Mondays through Fridays. At the end of the daily schedule, they were free to participate in the planned and supervised Center recreation programs and to use community resources. Students over 21 were allowed to spend weekends away from the Center at their own discretion, but written permission from parents was required from those who had not reached that age. A curfew schedule and pass system were in effect for all Center enrollees.

Center evaluation services were comprehensive in orientation and application, and incorporated the generally accepted basic components - physical, psychological, social and vocational. These services were utilized during this project, as adapted for use with a deaf population. Communications during these services, between clients and staff, were planned on the basis of individual capabilities. The evaluation service was available at any time during the student's program, if needed, but was usually completed for most students during the earliest part of their Center programs. Generally, an evaluation program for an incoming student at the Center was planned for from ten to thirty days, but it was extended to a maximum of 120 days in some instances.

Because of limitations of age, education, communication skills, and work experience, some clients were not ready for formal evaluation when they enrolled at the Center. Both the Prevocational Adjustment Training Unit of the Evaluation Section and vocational training areas were available to project clients for a variety of meaningful work activities. The objectives for these students were more positive work habits, a greater sense of responsibility toward the world of work, familiarization with various work experiences, and orientation to independent living.

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*Rehabilitation clients are referred to as students during Center enrollment. The words "client" and "student" are used interchangeably throughout this report.

The Center offered vocational training courses in 23 different areas. Over 30 specific courses were offered inside these various areas, and individual courses were formulated for students whose needs were not met by those formally organized ones. The vocational instructors were experienced in fitting a course of study to the needs of an individual, and with the specialized help of the project staff in communications, they were more able to meet the needs of the deaf. No specialized vocational training instructors for the deaf were employed. Deaf students were served by the regular Center instructors alongside hearing students.

All courses were designed to give the specific skills needed for placement in particular vocations. Special education instruction was given to any student on recommendation of his vocational instructor, if remedial work was needed for him to overcome academic deficiencies which were impeding his progress. Training courses were predicated on given lengths of time, but the actual duration of a student's training depended on the progress he made. The estimated time of completion was determined by the amount of time an "average student", enrolled full time, was expected to take in acquiring substantial skills for placement. However, project clientele were enrolled for extended periods of time as necessary and so long as they made satisfactory progress. Due to educational deficiencies and problems of communication found during the pilot study with the deaf, it was expected that a number of project clientele would be enrolled for a longer period of time, in their respective courses, than regular Center clientele.

All students who completed a prescribed training course received a certificate at one of the quarterly graduation exercises. Students who completed their programs between the exercises were given their certificates at the time of discharge, but their names were listed on the program for graduation at the end of the quarter, and they were invited to return for the exercises with their families and other guests.

It was expected at the outset of the project that the vocational training available would meet the needs of most of the project clientele. However, special equipment and visual aids were added to meet the needs of the deaf, and some special course modifications were accomplished for these persons.

Seminars with emphasis on ancillary-vocational topics were conducted by project personnel trained in working with the deaf. Discussions included: shop vocabulary and language; work attitudes; job hunting techniques; familiarization with employment applications; methods of selling oneself to an employer; employer-employee relationships; payroll deductions and taxes; retirement plans; community social agencies; responsibilities of good citizens; wise use of leisure time; current events; personal grooming; and immediate problems arising in social or training areas. These seminars utilized filmstrips, movies, guest speakers, mock interviews, group participation and discussion. Deaf adults who were successful in their areas of employment were brought in occasionally as guest speakers.

Students were encouraged to use speech in all Center activities. Speech training and therapy were available to provide tutoring in the training areas to augment regular instruction. Vocational tutoring schedules for students were based upon individual need. Some students were able to function with almost no special assistance while some needed daily assistance. Special remedial education related to the vocational training areas, was also another service made available to the students.

One to two months prior to the completion of the student's Center training program, intensive preparation for placement was initiated. Due to geographical considerations, the Center did not take final responsibility for placement, but several of the project clients found jobs through the efforts of the staff who trained them. Complete monthly reports kept the sponsor informed of all aspects of the student's progress, with emphasis on employment potential. If a student desired to return to his home area, the Center attempted to work out a plan of placement with the sponsor well in advance of discharge. Specific preparation was provided for known job possibilities.

Every project client was provided as meaningful a program as possible during his stay at the Center.

The Project Clientele

Clients receiving services through this project came from Illinois, Utah, Mississippi, Louisiana, Missouri, Kansas, Oklahoma, Texas, New Mexico, and Arkansas. By project design, more clients were expected from Arkansas than from any other one state.

Those deaf persons accepted into the project were of legal work age. Although an initial requirement for admission was that each client must show some potential for rehabilitation success, a number were enrolled on a trial basis who were "borderline" in this respect; a few were enrolled who had no apparent potential.

To describe more adequately the project sample, certain demographic data and related comments are presented in the remainder of this chapter.

During the tenure of the project, a total of 131 deaf and hard of hearing adults were accepted for services at the Hot Springs Rehabilitation Center. They presented widely varying backgrounds, experiences, problems and abilities.

Ages of the project clients ranged from sixteen to sixty with 52% of them in the 20-24 age range and 36% in the 16-19 age group. The mean age for the total group was 21. Table I presents a detailed review of information regarding the ages of project clientele.

TABLE I -- AGE RANGES OF PROJECT CLIENTELE (N=131)

Ages	Total	Percent
16-19	47	36
20-24	67	52
25-39	13	9
40 and over	4	3
Totals	131	100

Seventy-one percent of the population were male; 29% were female; Negroes comprised 20% of the enrollment; Caucasians and others, 80%. Only six of the 131 individuals served in the project were married or had been married prior to Center enrollment.

Table II, following, shows a distribution of the clients according to their home states.

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TABLE II -- TOTAL CLIENTS SERVED ACCORDING TO STATE AND SEX (N=131)

State	Male	Female	Total	Percent
Arkansas	24	11	35	27
Kansas	3	3	6	5
Louisiana	16	8	24	18
Mississippi	4	7	11	8
Missouri	7	2	9	7
New Mexico	5	2	7	5
Oklahoma	11	2	13	10
Texas	18	3	21	16
Illinois*	3	0	3	2
Utah*	2	0	2	2
Totals	93	38	131	100

*not included in original project state area

As expected, more clients were served from Arkansas than any other state, however, the total number of Arkansas students represented only 27% of the project clientele.

As shown in Figure 1, the majority of clients were from towns or cities in excess of 10,000 population. The persons included in the project had experienced a variety of school settings prior to their enrollment at the Center. A total of 78 clients (60%) had attended only state residential schools for the deaf; 13 students (10%) began their education in public schools for hearing children but subsequently transferred to state residential schools for the deaf; 11 students (8%) had attended only public schools for hearing children and young people; and five (4%) commenced school programs in state residential schools for the deaf but proceeded to local public elementary and secondary schools. The educational movement for an additional four students was from day schools for the deaf to local public schools; for three students, from day schools for the deaf to state residential schools for the deaf; and for two other students, from state schools for the deaf to day schools for the deaf. An additional nine students experienced a mixture of two and three different types of educational settings. Several of the students whose only educational experience was in state residential schools for the deaf had attended two or three such schools.

The total number of years in school was known for 121 of the 131 individuals comprising the project population.* The range in the total years of schooling included two project clients who had no formal educational experiences whatever to one individual who had 18 years of formal education. The majority of the project clientele had experienced between 11 and 14 years of formal schooling, including pre-school programs. The mean, median, and mode fell at 12 years of education for the groups. Table III shows a full report of years of education.

TABLE III -- YEARS OF SCHOOLING OF PROJECT CLIENTELE

Years of Schooling	Number	Percent
1-4	5	4
5-10	26	20
11-14	72	55
15-18	18	14
Unknown	10	7
Totals	131	100

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*Personal data were sometimes unobtainable due to lack of records and due to lack of client's communication ability.

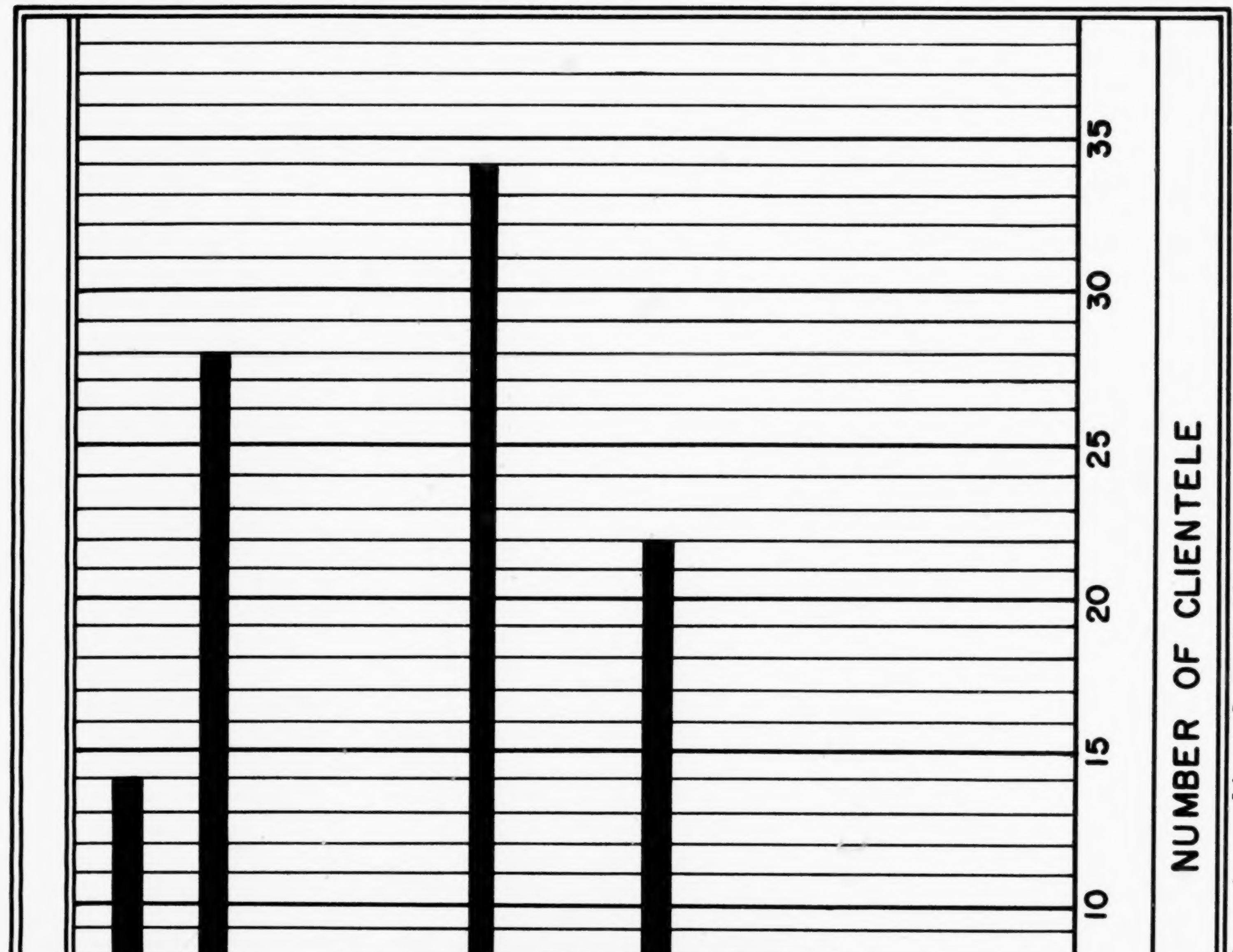

Figure 1. Size of home communities of project clientele. N=131

An item of information requested on the pre-enrollment data sheet was the student's discharge status from the last school he had attended. This information was reported by rehabilitation field counselors for 116 students. Sixty-six (56%) of these 116 persons were classified by the schools they attended as completing the school programs; twenty-five (22%) were regarded by the schools as volitional dropouts; and another 25 were administratively discharged. Two of the 131 project clients did not attend school and discharge information on the remaining 13 students was not available.

According to case information submitted on project clientele for review by the Center Admissions Committee, 54 (41%) had received no diploma or certificate of any kind when their school programs were terminated; 28 (21%) had received academic diplomas; another 28 had received vocational diplomas; 5 students (4%) received both an academic and vocational diploma; and 3 (2%) received attendance certificates. Again, two students of the 131 persons comprising the project population did not attend any kind of school program; information regarding type of certificate or diploma received from school attendance was not available for 11 (8%) of the project clients.

The ages of the project clientele upon terminating their school programs ranged from 12 to 23. The mode fell at 19 years and the mean age was 18.5. These figures are based on a total of 112 persons since this information for 17 of the project clients could not be obtained and two students had no school experience.

Most of the project clients had been out of school a relatively short time prior to their enrollment at the Center. Sixty-six percent of them enrolled within three years after terminating their school programs. Among the total number of students for whom school termination information was available (112) thirty-seven percent enrolled for services at the Center within one year of leaving school; 2 % enrolled from one to two years after leaving school; 10% enrolled from 2 to 3 years after leaving school; 6% enrolled from 3 to 4 years after terminating their school experience; 9% enrolled after being out of school from 4 to 6 years; and another 9% enrolled after being out of school from 6 to 9 years.

According to information provided by field counselors, the mode of interpersonal communication preferred by 46% of the project clients was sign language; by 20% of them a combination of sign language and use of pad and pencil; by 9%, speech and speechreading; and by 8%, a combination of speech and speechreading and pad and pencil. Field counselors were asked to rate subjectively the speaking and speechreading ability of the project clients. Twenty-nine clients were rated as having good to excellent speech, and 102 were rated as having poor or no speech ability; forty-one were judged to have good to excellent lipreading (speechreading) ability, and 88 were rated to have poor or no speechreading ability. Of the 131 project clients, 49 were reported to have hearing aids.

A total of 100 project clients were administered both the California Reading and the Stanford Paragraph Meaning Tests by project personnel. The mean California Reading Test score for the 100 students was grade 5.5, and for the Stanford Achievement Test, Paragraph Meaning Section, 3.7. The Paragraph Meaning Section score was judged to be the best indicator of ability to handle the English language.

The receptive language level assigned to the project clients was based upon (1) results of the Stanford Achievement Test, Paragraph Meaning Section, and (2) in instances where students did not or could not take the tests, the judgement of trained and experienced teachers of the deaf. Ten percent of the project clients were totally illiterate; (62%) were regarded as functionally illiterate (determined by a tested or assigned language level below grade 4); 22% tested between grades 4 and 6; and 6% were measured at grade 6 or above.

The majority (66%) of the project clients tested as average or above in intelligence as measured by performance instruments. Six percent had test scores at the retarded level; 8% at the borderline level; and 19% at the dull normal level.

Several students were not feasible for complete testing; however, 112 were administered both the performance section of the Weschler Adult Intelligence Scale and the Revised Beta Examination. The mean intelligence score obtained from the administration of the Revised Beta was 95.7; for the performance section of the WAIS, 96.1. The product moment correlation coefficient between the two sets of scores was .86. (Note that the administration of these instruments did not follow standardized procedures due to the communication problems with these students.)

According to pre-enrollment information provided by the state rehabilitation field counselors to the Center Admissions Committee and to project personnel, 90 of the 131 project clients were known to have received some type of vocational skill training prior to their enrollment at the Hot Springs Rehabilitation Center; 24 were reported as having had no vocational training whatever; and no information could be obtained as to whether the remaining 17 persons had previous vocational skill training. For the majority of individuals, previous vocational training was taken while they were still students in one or more of twelve state residential schools for the deaf. A few students received on-the-job training and some others obtained training in public high schools, special trade schools, and public vocational secondary schools. The most frequently reported vocational training areas were: laundry and related jobs; woodworking; printing; clerical work; homemaking; upholstery; sewing; cosmetology; baking; auto mechanics; body and fender; and shoe repair.

Thirty-three percent (44) of the individuals served in the project were reported to have had a history of full time work experience; 43% (56) were reported to have had no previous employment experience whatever; 20% (26) were reported to have had summer or part time employment experiences; and information was not available for the remaining 4 percent. An analysis of the descriptions of the work performed in the jobs held revealed that the majority of these persons were employed at unskilled or semi-skilled levels in manual occupations. Over fifty jobs were reported, representing a diversified number of occupational settings.

The pre-enrollment data sheet called for the project clients' vocational objectives or aspirations. Several clients listed one or more vocational objectives stating that if it were not possible to receive training in one area, they would like training in another field. Some were not sure which of three or four stated areas they would like best. Noting the fact that several students stated two and a few as many as four, areas of vocational interest, the twelve areas mentioned most frequently, with the number of times listed, were as follows: printing trades (21); laundry and dry cleaning (15); automobile body and fender repair (14); clerical work (8); sewing trades (7); key punch (6); auto mechanics (6); upholstery (6); cosmetology (5); drafting (4); welding (4); and commercial art (4).

One may wonder why the 131 project clientele were referred to the Center if they had such extensive special schooling, vocational training, and work experience backgrounds prior to enrollment. Case records provide clear indication of their need for habilitative/rehabilitative services.

According to previously reported information in this section of the report, 72% of the 131 project clientele were below the fourth grade receptive language level; 41% terminated school experience with no diploma or certificate of any kind; 34% were at the dull normal level or less in intelligence; 43% were reported to have no previous employment experience whatever; and 18% were reported to have no vocational skill training whatever prior to Center enrollment. Many of the 131 project clients were extremely dependent - unable to take their places in the community as independent, self-supporting, self-directing citizens; they were in need of experiences in a setting, transitional between school and responsible independent living. Several were not satisfied with the areas of vocational training received in school - they did not wish to seek employment in the areas for which they were trained. Others who had been trained for employment previous to Center enrollment did not have salable skills. Others failed to satisfy their employers when provided a competitive work experience due to poor work habits, attitudes, and interpersonal skills.

Forty persons accepted for services in the project (30% of the total) had serious disabilities in addition to impaired hearing. These included one or a combination of the following: character and behavior disorders; visual impairments; cerebral palsy; orthopedic conditions; and others (ulcers, diabetes, chronic brain syndrome, cardiac disease, and mental retardation). Those with character and behavior disorders presented the project and Center staff with its greatest challenges.

Information regarding onset, etiology, type and degree of hearing loss cannot be reported for the total 131 students with accuracy. Disappointingly, this information was reported with less frequency and accuracy than other types of information requested of referral sources by project staff and the Center Admissions Committee. Of the 131 project clients, 68 were known to have congenital hearing losses; 20 lost their hearing during the first year of life; and 7 were known to have lost their hearing at the age of five or above. Reported information on the causes of deafness was quite scanty. Among the listed causes were: heredity; toxic drugs; measles during mother's pregnancy; birth injury; and childhood diseases.

Little specific information was available concerning type of hearing loss; however, it was assumed that the hearing losses of most of the project clients were neurosensory. The majority of the clients were affected by profound hearing losses, but there were a few who had only moderate or mild hearing losses.

Characteristics and needs of the project population indicated that the Center and project staffs were presented with a tremendous challenge.

Data Collection

Data collection instruments for project purposes included the following: (1) student enrollment data form; (2) student discharge record form; and (3) follow-up questionnaires for field counselors, parents, students, and employers. Evaluative statements were obtained from Advisory Committee members, field counselors in conference at the Center, and the project staff members. Supplementing these were case records submitted on each client by the rehabilitation field counselors and case records accumulated by Center personnel during the course of the students' Center enrollments. Information was tabulated and the content analyzed for presentation through narrative and table form.

CHAPTER III

RESULTS

RECRUITMENT AND REFERRAL INFORMATION

During the course of the project, a total of 150 deaf and hard of hearing rehabilitation clients were referred to the Center for services. 131 of these persons were accepted for services; 14 were deferred; and five were denied admission.

Of the 131 rehabilitation clients served during the study, 109 were referred by their state rehabilitation field counselors for formal evaluation services, and 83 of these were subsequently enrolled in Center vocational training courses. Another 22 clients were enrolled directly into Center vocational training courses without Center evaluation services. Another way of reviewing the enrollment status of the total 131 project clients is as follows:

...105 clients were served in vocational skill training courses (83 of these were evaluated by project personnel prior to enrollment in vocational training programs; 22 went directly into training without evaluation services);

...21 were served only in the evaluation unit, that is, they did not remain at the Center for a vocational skill training program; and

...5 were receiving services in the evaluation unit at the termination of the program.

When the project officially terminated, 22% of the total number of clients who enrolled for services in the project were still receiving services; 43.5% had completed vocational skill training courses and had graduated; 6% had completed evaluation services with no further Center services provided; 13.5% had dropped out volitionally; and 15% had been discharged by administrative or caseworkers' decisions.

Recruitment of Project Clientele

Personnel of a new service program must find adequate means of disseminating information to establish referral sources for clientele and to maintain a steady flow of applications for services. Project personnel initially believed that this had been achieved; however, circumstances soon proved otherwise.

Superintendents of schools for the deaf, administrators of state rehabilitation agencies, state rehabilitation agency field counselors for the deaf, and counselors in private agencies serving deaf adults from an eight state area surrounding Arkansas were personally familiar with the Center and the services offered there for deaf adults. All but one or two of these persons had participated in at least one conference at the Center for orientation to its service program for deaf persons; most had made repeated visits to the Center. They indicated their support for the demonstration program of integrated services for deaf adults at the Center and pledged their assistance in locating and referring deaf persons who were in need of the services already available and those being planned. Information packets describing the facility and materials for processing clients for admission to the Center were distributed among the state rehabilitation agency field counselors.

In a further attempt to insure sufficient clientele to render the study meaningful, arrangements were made utilizing both Arkansas Rehabilitation Service and VRA funds to provide essentially free services to deaf persons from states other than Arkansas--out of state rehabilitation agencies would pay only 20% of the Center service costs for half of the clients they referred. Center services for the remaining clients would be provided without cost to those agencies or their clients.

Referrals of deaf persons to the project program were expected to rise quickly to a level where project staff and the Center Admissions Committee would need to exercise selectivity in accepting persons for services. Within four months after the project started, 25 deaf persons were enrolled. However, for one year afterward, the enrollment of project clientele had not increased; and in December, 1966, the number dropped to 13 persons. It was obvious that additional efforts would have to be undertaken if student enrollment were to be at a level sufficient to justify the continuance of the experimental program.

As a first effort to increase enrollment, information about the Center program was sent directly to hundreds of parents of deaf offspring who possibly needed the services being offered. These parents had been identified in the Southwest Survey of Young Deaf Adults (VRA Project RD-1652).

About the same time this information was being mailed, administrators and field counselors of the state rehabilitation agencies in each of the states cooperating in the project were contacted about the small number of referrals. A special conference was conducted at the Center to review the program, obtain consultation from counselors in the field, and to discuss candidly the referral problem. This meeting was conducted in January, 1967. Counselors from eight state rehabilitation agencies and five private agencies serving deaf adults participated. These persons were encouraged to be completely frank in their assessments of the project program. They were informed that if the program was not effective, then those responsible for it should either attempt to rectify the situation, if possible, or regard its efforts to serve deaf persons on an integrated basis as undesirable. After a thorough review of the project program, consultation with project staff members, and personal interviews with Center deaf students, these counselors reaffirmed their initial support of the program. Specifically: (1) they confirmed the judgement of project staff members that effective services to the deaf were being provided; (2) they stated that the program was sorely needed as it provided a service resource unavailable in their home areas; and (3) they pledged renewed efforts to seek out those deaf persons who were in need of and could benefit from the services available for the deaf at the Center.

Along with the letters to parents and the conference for field personnel from the project states, project personnel initiated more direct contacts with persons in the "deaf community." Leaders of this "community" were extended an open invitation to tour the Center, to visit the project staff, and to offer their suggestions and views regarding the program. Also, deaf persons were added to the project staff and this greatly enhanced the acceptability of the program to potential deaf students.

From this period of time, the number of referrals increased and peaked at an enrollment of 42 deaf persons -- approximately 10% of the entire Center student body.

Admissions and Referral Information

All referrals of deaf persons to the Center were required to come from counselors of state rehabilitation agencies. These counselors were to sponsor deaf persons through the rehabilitation process and assist the project staff in securing information necessary for serving the client and for evaluating the effect of Center services.

The Center Admissions Committee exercised final authority for decisions regarding the enrollment of persons referred to the Center for services; however, the Committee exercised a much more liberal set of criteria for the admission of deaf clients than it did for the routine admission of hearing rehabilitation clients to the Center. This was done to build up the enrollment quickly and to permit an evaluation of the Center's capability to serve low achieving and multiply handicapped deaf adults. As examples of deaf persons who were accepted for services on a trial basis but who probably would have been denied services if a special study had not been in progress are the following: a young deaf man who was also a quadraplegic; a delinquent teenager; two men with psychiatric diagnoses and long-term institutionalization; deaf persons who also had severe cerebral palsy; and students who had serious mental/emotional problems.

The decision for or against admission was based upon case information submitted by the field counselor according to directions and forms supplied by the Center and the project coordinator. On occasion the case information submitted with the counselor's admission request was quite scanty, but this did not deter acceptance if the information which was available indicated that the client could benefit from Center services. There were times when telephone communications which were undertaken between Center and field personnel to clarify written communications which had been exchanged or to expedite the request for the admission of a client. The Center extended every effort to make referrals of clients to the Center easy for field personnel and to minimize, as much as possible, the paperwork involved.

The 131 students who were accepted for services were referred by more than 60 different counselors; 73 (56%) of these 131 students were referred by counselors who specialized in serving deaf and hard of hearing rehabilitation clients. In some instances, agencies experienced personnel turnovers while the student was enrolled at the Center and therefore some project students were served by more than one field counselor. Of the total number of field counselors involved with project clientele, 14 were trained and/or experienced workers with the deaf.

These counselors were asked to provide information regarding their referral source(s) for each of the persons they referred to the Center. By far, schools in which the students had been enrolled were the most frequent referral sources, having been named in 57 instances; the second most frequent referral sources were the clients' families. Other referral sources included one or a combination of the following: self referral; medical centers; speech and hearing centers; rehabilitation facilities; welfare agencies; state hospitals; local police; and employment security division offices. It was interesting that local police were listed as a referral source in six cases.

Rejected and Deferred Requests for Admission

During the project, five requests of field counselors for the admission of their deaf clients to the Center were rejected and 14 such requests were deferred.

There was always regret on the part of the Center Admissions Committee and the project coordinator when a person was denied services. A great deal of care was taken in evaluating such cases to ensure that the Center was truly not in a position to provide a beneficial service program. The Admissions Committee was always prepared to reconsider their decisions on such cases if additional information could be presented to show some evidence that Center services might be of assistance to the client. The only reason for deferring or rejecting a person for services was that the case information and communications with the referring field counselor indicated that the person could not be served effectively. During the project there were a handful of deaf persons whose first request for admission was deferred or rejected but who were later admitted for services; additional communication from their counselors provided indication that their enrollment might be beneficial, so the Admissions Committee reversed their decision and accepted them for services.

Deferring a request for admission was the Admissions Committee's manner of saying, "It appears that we cannot serve your client. However, case information may not be complete, and additional information may indicate that we could serve him." On occasion, the case information submitted by a rehabilitation field counselor was extremely scanty and the Admissions Committee deferred any decision regarding the request for admissions until more information was made available. In these instances, the Committee specified the type of information needed. Among the 14 requests for admission which were deferred, case information for 7 indicated severe character and behavior disorders with the possibility of neurosis or psychosis; one was an active alcoholic; one had a history of uncontrolled seizures; one was severely retarded; two needed only limited services (speech and auditory training and academic and communication training) which were not offered in isolation at the Center; and two were deferred early in the project because they did not meet the enrollment conditions of being from one of the eight project states or of remaining within the quota requirements stipulated in the project plan (both of these were later contacted to reapply but their counselors had already made other service or employment plans).

Among those five requests for admission which were rejected: one was below the legal work age; one was severely retarded and obviously in need of a terminal sheltered environment; and three had physical or mental illnesses which required services totally unavailable at the Center.

ENROLLMENT INFORMATION

Table IV presents enrollment and discharge information for each year of the project. By coincidence, 44 persons were enrolled into the program during each year of the project. The number of students discharged during the first year of the project totaled 19, for the second year, 40, and for the final year, 44. Twenty-nine students remained in enrollment at the time the project was terminated.

A total of 131 different persons were enrolled in the project with one of these persons being discharged (by administrative decision due to behavior problems) and reenrolling during the project period.

TABLE IV -- ENROLLMENTS AND DISCHARGES OF PROJECT CLIENTELE ACCORDING TO PROJECT YEAR (N=131)*

Project Year	Carried From Previous Year	Enrolled During Project Year	Total Served	Number Discharged
8-1-65 - 7-31-66		44 (1)	44	19
8-1-66 - 7-31-67	25	44	69	40
8-1-67 - 5-31-68	29	44	73	44
		Total Discharged		103 (2)

*One student was discharged and then reenrolled during the project period.
(1)Six deaf students, enrolled at the Center when RD-1932 commenced, were transferred into the project program.
(2)29 students remained in enrollment at the close of the project.

Figure 2 shows the end of the month account of admissions, discharges, and total enrollments for the three year study. The period from September to December, 1966, saw a sharp decrease in the number of enrollments. The graph also shows that the total number of students enrolled at one time did not increase to a substantial number (more than 30) until the beginning of the last project year. Note that students can be admitted for services on any given Monday and may be discharged at any time of the week during any part of the month. All Center admissions are curtailed during November and halted in December since there is a two week period during the Christmas and New Year holidays when the Center is closed.

Length of Stay

Information on average length of stay is not too meaningful for a variety of reasons including the fact that the "open" admission policy of the project made it possible to accept nearly every individual referred for services. Even students who the Admissions Committee felt certain could not be served successfully were permitted to enroll on a "trial" basis. This procedure made it possible to investigate the type of client the Center could and could not serve, but it affected the number of student programs terminated, "program unsuccessful," as well as the average length of stay.

The average number of days spent in a formal evaluation program by those so served was 41.7; the students who terminated programs from vocational training courses spent an average of 209.4 days in training; for the total 103 terminating students, the average length of stay was 190.2 days. The maximum number of days spent in (1) evaluation, (2) training, and (3) total time by any one person were 138, 441, and 445 respectively.

Discharges

On the date the project ended, May 31, 1968, 29 students remained in enrollment and 103 had terminated their Center programs (one of these persons re-enrolled after an earlier administrative discharge* and therefore was classified both with those who had been discharged and with the 29 who were still enrolled at

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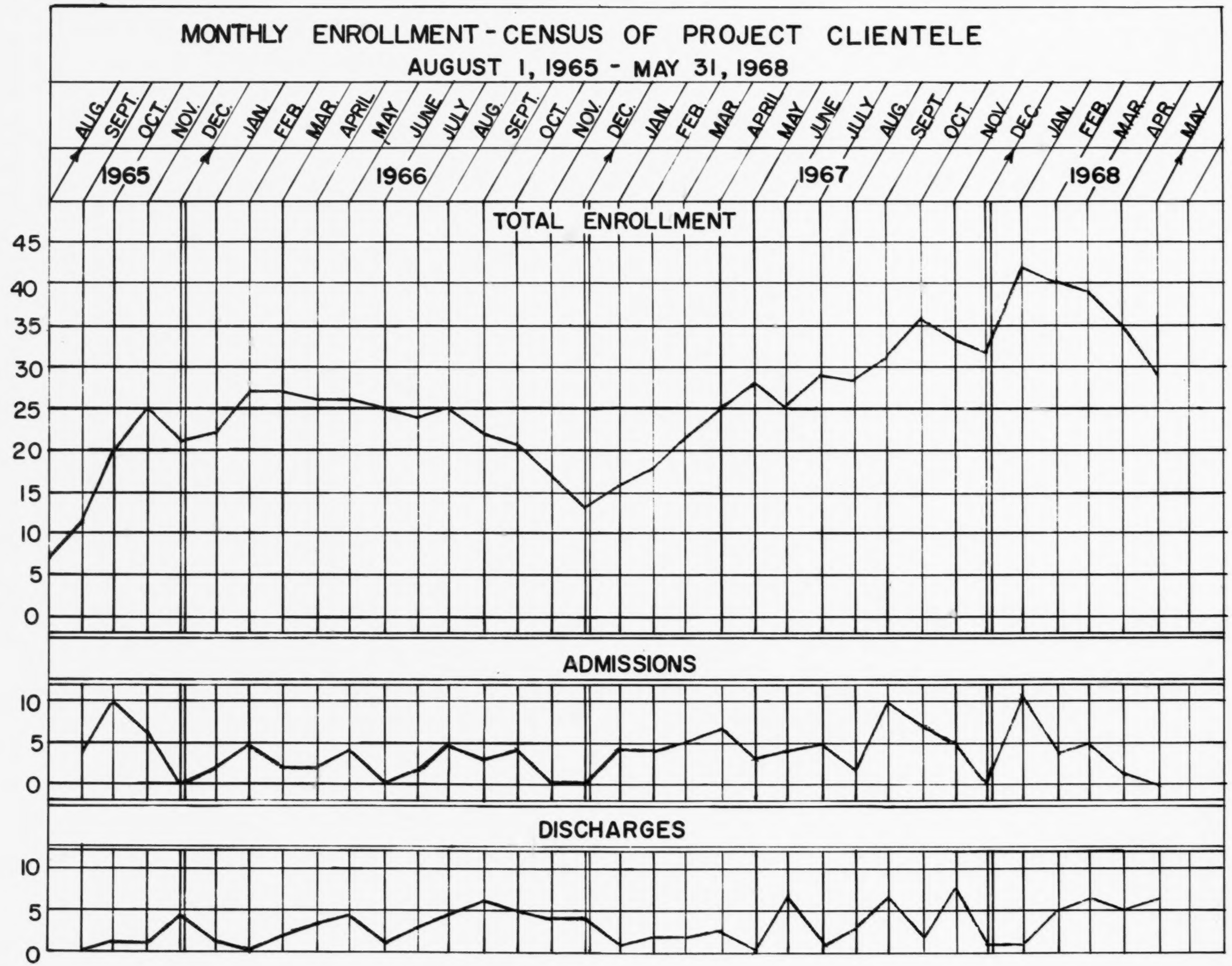
*The term "discharge" denotes students whose Center programs officially terminated regardless of reason.

Figure 2



MONTHLY ENROLLMENT - CENSUS OF PROJECT CLIENTELE
AUGUST 1, 1965 - MAY 31, 1968

the close of the study).

Of the 103 clients who terminated their programs, (1) 81 were discharged from a vocational training program, 57 of whom received certificates of completion; and (2) 22 were discharged from an evaluation program, 8 completing services in the Center evaluation unit with no further Center services being desired or recommended. Note Table V for a concise presentation of discharge information.

TABLE V -- DISCHARGE STATUS OF PROJECT CLIENTELE AT THE TERMINATION OF THE PROJECT (5-31-68) N=103 (1)

Reason for Discharge	No. of Students	Percent of N
Completed Training	57	55.3
Completed Evaluation no further services	8	7.8
Evaluation Dropout (2)	14	13.6
Training Dropout (2)	24	23.3
Totals	103	100.0

(1) Twenty-nine students remained in enrollment at the close of the project.

(2) "Dropout" is used to indicate those who terminated both volitionally and by administrative or caseworkers' decisions. See table VI for a breakdown of reasons.

The 57 students who completed vocational skill training were distributed among 13 Center vocational training areas in 18 different courses as follows:

Auto Body and Fender Repair	1
Auto Mechanics	1
Business Education	2
Custodial	1
Drafting	2
Food Services	
General Cafeteria Work	1
Meatcutting	3
General Mechanics	2
Laundry	
Laundry work only	6
Laundry and wool pressing	6
Printing (offset)	
Bindery only	6
Other processes and/or press work	13
Sewing	
Drapery and Slip Covers	4
General Sewing	1
Dress making, tailoring, alterations	2
Upholstery	4
Watch Repair	1
Woodworking	1
Total	57

The Certificate of Completion of Training granted to each student who "successfully" completed his training program contained a statement specifying the level of training achieved and the specific tasks of which the person was capable.

Eight clients completed a formal evaluation program, but did not remain at the Center for continued services. Seven of these eight students were classified with the 40 multiply handicapped deaf persons mentioned previously. At the time, Center staff and services were not capable of meeting their needs, if it were possible for them to be met at all.

For a variety of reasons, 38 of the persons who enrolled in the project did not complete the service or services for which they were referred. This number is nearly 37% of the 103 students whose programs had terminated by the time the project ended. Table VI shows that 18 of the 38 dropouts left of their own volition and 20 were discharged as a result of a decision by the Center administration or caseworkers -- 7 of these were discharged because of behavior which could not be tolerated at the time within the Center milieu and 13 because the Center program was judged inappropriate for or unable to meet their needs.

TABLE VI -- NUMBER OF DROPOUTS FROM THE CENTER PROGRAM FOR THE DEAF AND REASONS FOR PREMATURE TERMINATION (N=38)

Service from which Terminated	Reason for Discharge		
	Volitional	Unacceptable Behavior*	Severe Multiple Handicaps*
Evaluation	6	2	6
Training	12	5	7
Totals	18	7	13

*Termination of these students' programs was the result of administrative or caseworkers' decisions.

SERVICES

All of the regular Center services were made available to project clients on the same basis as for regular students. Regular Center staff members were expected to serve deaf students on a basis equal to the hearing persons. In addition to the regular services, some of which were provided by existing staff members and some by project personnel, other services were offered by the project staff solely for deaf students to more adequately meet their needs.

Regular Center services included the following: orientation to the Center; evaluation and diagnosis (social, medical, vocational, and psychological); medical services (medical supervision, medical consultation, physical therapy, occupational therapy, speech therapy, audiological screening, and numerous medical clinics); vocational skill training (23 vocational areas); special education (generally related to the vocational training area); dormitory accommodations; supervised recreation programs; and student bank services. The special services added especially for the deaf and provided by the project staff included: vocational tutoring; communication training (written, manual, and oral); communication services (interpreting, telephoning, letter writing, and reading); group counseling sessions; and discussion seminars (informal but scheduled small group meetings to discuss various topics related to employment and independent living).

Each student was enrolled, as required by Center policy, in one of three basic service programs: (1) evaluation (vocationally oriented); (2) vocational training; and (3) medical (evaluation, limb fitting, gait training, physical and occupational therapy, etc.). However, service offerings were flexible: students whose primary service was vocational evaluation could also receive medical evaluation service; students whose enrollment status was vocational training could be scheduled when necessary for medical attention, special education, or speech therapy; students whose primary program was medical could be scheduled if physically able for a minimum of two hours of daily vocational evaluation services or for a few hours a day in a vocational skill training area. Counseling was, of course, a continuing service throughout the students' programs regardless of enrollment status.

The regular Center service programs were not based upon a system of semesters or terms of any kind. This included even the vocational training programs. From 15 to 25 new students enrolled at the Center each Monday throughout the entire year. They were not organized into classes, and no student competed with another student for grades or for "success." Pre-enrollment or Center evaluation determined the combination of services needed by each student on an individual basis.

TABLE VII -- SUMMARY OF SERVICES RECEIVED BY ONE FEMALE PROJECT CLIENT

Service	Total Time Enrolled
Vocational Evaluation	31 days
Vocational Training	384 days
On-the-job Training	20 days
Group Counseling	48 hours
Discussion Seminars	44 hours
Vocational Tutoring	51 hours
Sign Language Instruction	8 hours
Driver Education	48 hours
Speech Evaluation and Therapy	26 hours
Personal, Social and Vocational Counseling	As needed
Medical Services:	
General Medical Examination	
Chest X-Ray	
Ophthalmology Consultation	

Orientation to the Center

All newly enrolling regular Center students were conducted through a one day period of orientation to the facility. This orientation included: (1) a presentation of the services, purpose and operating philosophy of the Center; (2) a review and discussion of Center policies, rules, and procedures; (3) an introduction to key staff members; (4) a tour of the main building and grounds; and (5) a general medical examination and chest X-ray. The first half-day of orientation was conducted mostly through lecture and a question and answer period; the tour followed. Students were given appointment slips with the place and time of their medical appointments.

A variety of approaches were used to orient deaf clients to the Center. No one approach seemed best for all students. On two or three occasions deaf clients who possessed understandable speech and excellent speechreading skills participated in the regular orientation without assistance from project staff members.

Other students participated in the regular orientation but with an interpreter. Most of the project clients, however, seemed to benefit most from having a project staff member explain and discuss the "lecture" material on an individual basis and then join the hearing students with an interpreter for the tour. Orientation for some project students was conducted entirely by project personnel due to communication difficulties and the need for individual attention.

The task of fully orienting all deaf students to the entire facility and the rules, regulations, policies, and procedures in a few hours or even one or two days was generally impossible. Hearing students, in addition to the formal orientation, could benefit from printed copies of this information provided to all new students and also from daily conversations with fellow students. On the other hand, most of the deaf students were limited in reading abilities and of course missed out on much of the student discussion of rules and Center activities.

Frequently when Center staff members reported deaf students for flagrant rule breaking or minor infractions, project personnel could recall overlooking that detail during orientation and believed the student to be sincerely ignorant of the rule. As such oversights became apparent, they would be added to the many details to be discussed with a student during orientation.

A significant finding was that most of the deaf students benefitted little from an "explanation" of a procedure. They needed to experience the procedure. For example, rather than explaining the pass system required when leaving and returning to the Center grounds, project personnel assisted students in filling in an actual pass, showing them where it was to be taken, and demonstrating how it was used by the Center staff.

Center rules and regulations were rewritten in simple language for low achieving deaf students. Many still could not benefit from this so where possible, pictures were accumulated and the rules were communicated through gestures and pantomime. For example, the rule, "no guns, knives, or explosives are permitted on the Center grounds," was communicated by showing pictures of these objects and shaking the head, "no."

Communication with some clients was so severely limited that staff were able to communicate a rule or procedure only after the student had broken a rule or failed to follow a required procedure.

Evaluation Services

The Center evaluation services were vocationally oriented. The primary questions which the evaluators attempted to answer were: (1) Is the client employable?; (2) Is the client capable of benefitting from a vocational or technical training program?; and (3) What employment and/or training areas are most compatible with the client's interests, abilities, and potentials? The evaluators also were interested in noting personal and social factors which might impede, preclude, or contribute to success in a training program or successful employment: also, medical positives and negatives were explored in relation to possible training and employment potentials.

Data gathering vehicles used by regular Center evaluators included interviews, review of available data from various institutions or agencies which had served the client, formal psychosocial testing, manipulative skill testing, work or job-sample testing, tryouts in Center vocational training areas, simulated employment experiences in the sub-contract production workshop (the Center Pre-Vocational Adjustment Training Unit), and structured and unstructured observation of the client in various social and Center service situations. These procedures and processes were utilized but adapted for deaf clients. In addition, deaf students were occasionally placed with local employers for actual on-the-job evaluations of learning and employment potential.

During most of the project period, vocational evaluation of deaf students was conducted by personnel who were trained and experienced academic or vocational teachers of the deaf and who were oriented on-the-job to Center vocational evaluation procedures. The project counselor for the deaf worked closely with the evaluator in guiding the evaluation process and in reviewing the findings.

Center evaluation services were usually pre-requisite to selection of and enrollment in a Center training program; however, several clients were enrolled directly into training programs as a result of pre-Center determination of training interest and ability. The evaluation of students was usually accomplished in 30 days. However, a few students were evaluated in two weeks; others required up to 120 days before a dispostion could be made regarding trainability or employability. The time required varied with individual student needs. Those requiring longer than 30 days of evaluation services usually needed training tryouts in several areas before a training area could be determined with them.

At the conclusion of the initial 30 day evaluation period for a client, a staffing was conducted by the counselor so that all information obtained about the student could be integrated. Staff members included in the meeting were dormitory supervisors, recreation staff, medical personnel, evaluators, and any other persons who might have worked with the student during his enrollment in evaluation status (such as a vocational instructor who may have worked with the student during a training tryout). The student's adjustment to the Center, his personal and social behavior, his test behavior, interests, and learning abilities and potentials were discussed. A joint case decision was made to either retain or discharge the student.

A recommendation to discharge the student was based on the ability of the Center to serve the student and on the student's reaction to the Center. In some instances, evidence indicated that remaining at the Center would be damaging or harmful to the student himself or to the majority of the other students. Sometimes the area for which a student desired training was not available within the Center.

The decision to retain a student was accompanied by service recommendations such as an extension of evaluation services, enrollment in the Prevocational Adjustment Training Unit, or enrollment in a vocational skill training program. These general recommendations would be supported with evidence for the need of other specific services such as special (or basic) education, speech therapy, intensive counseling, medical services, etc. An individualized schedule of services was designed to meet the needs of each student. Flexibility of service scheduling was a strength of the Center program.

A total of 109 project clientele were served in the Center evaluation unit. From one to ten clients were served at one time. This experience revealed a number of useful findings:

1. Evaluation services were most effective and the evaluation findings most valid when the evaluator was a trained and experienced professional worker with the deaf. The evaluator's skill must include formal manual communication abilities as well as the ability to "communicate" with non-verbal and non-signing deaf persons.
2. Evaluators found that the adequacy of the evaluation service was affected if more than five deaf persons were enrolled at once for full time evaluation services. With more than five students at a time, each could not receive the individual attention required for a thorough and valid evaluation.
3. Most students could not respond to highly verbal evaluation tests due to their educational lags. Job sample testing tryouts in Center vocational training areas, and on-the-job evaluations were better suited to determining the abilities and interests of low achieving and multiply handicapped deaf persons than were paper and pencil tests.
4. A critical need was to orient the deaf student to the importance of the evaluation program. On one occasion, early in the project period, five deaf students who enrolled for evaluation services on the same date from the same state, rebelled against their involvement in an evaluation program. They came to be "trained -- not tested." They knew in what areas they wanted to be trained and they did not want to waste time being evaluated. Project personnel had inappropriately assumed that these students had been well oriented by their field counselors to accepting an evaluation program and had not taken the time to discuss this Center service with them. From that time forward, each new student who enrolled for evaluation services was given an orientation to the evaluation program which included a tour of the job sample testing areas; an explanation (to the extent communication would allow) of the various methods of obtaining evaluative information; a discussion of how the evaluation services would benefit a student; the anticipated length the student would spend in evaluation; and other information.
5. There was a great temptation to manipulate deaf clients, especially those who were low achievers and/or mutiply disabled. Sometimes there seemed to be greater speed and ease in planning for rather than with the client and in working on rather than with him. There was a need to be constantly aware of this danger and to include and involve the client in every step of his rehabilitation process.
6. Many of the project clients demonstrated a great need for general orientation to employment and for job exploration activities prior to selection of a training or work area; they had scanty general knowledge of the "world of work." Many seemed willing to acquiesce to vocational training in areas much below their potentials.
7. The deaf member of the evaluation department who was added during the last year of the project contributed a great deal to the evaluation service as well as the project in general. Communication problems between staff and students seemed to lessen and acceptance of the entire program of services for the deaf seemed to be much more widely accepted by persons who were actual or potential sources of referral of deaf persons to the Center.
8. Evaluation should not necessarily focus solely on vocational and employment goals. Equally important, if not more important, is an evaluation of the client's ability to live independently -- to live in the community at large with minimal or no assistance from parents, professional workers, or close friends. The majority of clients served in the project were grossly lacking in such matters as how to find an apartment; budgeting; banking services; use of postal services; city transportation systems; grocery

shopping; credit buying; and many other matters relating to "successful" independent community living. Knowledge of these areas needs to be evaluated and recommendations made for instruction and experiences which will fill the gaps that are evident.

Vocational Training

The Center offered 30 specific courses in 23 different occupational areas. These offerings were based upon employment needs in the geographical area served by the Center. Course content in each of these areas was built around the needs of individual students. In addition to Center offerings, local employers were cooperative in providing on-the-job training experience to "polish off" students' formal training.

Since Center vocational instruction was not based upon a system of semesters or terms of any kind but rather provided to each student on an individual basis, full time interpreters or note takers were not needed in the vocational training areas. While most of the vocational training instructors who had deaf students established adequate communication with the student for most aspects of imparting the trade skill, there were occasions where an interpreter was needed. For example, some instructors had a weekly one to two hour group session with their students for lecture and discussion; an interpreter was provided for these sessions if he were available. Also, on occasion, instructors would have difficulty explaining particular procedures due to either or both theirs and the students' limited communication skills, and interpreting services would be requested. During certain times of the project, only one or two of the project staff were capable interpreters. Sometimes the instructor's request could be filled; sometimes not.

During the course of the project, there was a demand by field counselors for deaf students to receive training in meat cutting and keypunch operation -- two training areas which were unavailable at the Center. As a direct result of these needs, project and Center staff explored the possibilities for adding these training courses. Subsequently, courses were designed, equipment secured, and deaf students were enrolled for training in the two new areas. In both courses, on-the-job experience in the local community after a sufficient period of Center training was an integral part of the course program. The keypunch operation course was made possible with assistance from Captioned Films for the Deaf, Office of Education, Washington, D. C. This Agency provided training films and projection equipment especially designed for teaching deaf persons. The Arkansas Rehabilitation Service through the Center provided the typewriter for pre-keypunch training, the keypunch machine, and the instructor.

Table VIII presents the vocational training areas in which deaf students were enrolled and the number enrolled in each area. A total of 105 students were enrolled during the project in vocational training areas, four of them in more than one area. Fully 31% (33) were served in Offset Printing Training; 20% (21) were served in Laundry/Dry Cleaning Training; 11% (12) enrolled for Automobile Body and Fender Repair Training; and 7.6% (8) enrolled in each of Business Education and Drapery/Slip Covers Training.

TABLE VIII-- DISTRIBUTION OF CLIENTS ACCORDING TO CENTER TRAINING AREA (N=105)*

Training Area	Number Project Clients Enrolled
Auto Mechanics	1
Auto Body and Fender	12
Business Education	8
Custodial	2
Drafting	3
Drapery and Slip Covers	8
Dressmaking	5
Food Service	2
General Mechanics	2
Laundry/Dry Cleaning	21
Meat Cutting	4
Printing	33
Watchmaking	1
Woodworking	2
Upholstery	5
Total	109**

*Students were served in the evaluation unit who did not enter a Center training program. Five were enrolled for full time evaluation services when the project terminated.

**Four students were served in more than one training area.

Experience in serving deaf persons alongside hearing persons in the vocational training areas resulted in the following findings:

1. Most deaf clients were enrolled for training in areas where instruction could be given primarily through demonstration.
2. The evidence is clear that most deaf students, even the more verbal and well adjusted ones, were "short-changed" in their vocational training programs -- that is, they did not progress to the level of which they were capable. The reasons were found, in most instances, in one or a combination of the following: (1) too large a student load for the instructor to give adequate individual attention to the one or two, or five or six, deaf persons in his training area; (2) lack of expert manual communication skill on the part of the instructor; (3) lack of sufficient orientation of the instructor to the problems of deafness; and (4) printed and written course materials being at too high a level for the students to understand. Many who "completed" training and who received certificates were trained at only the "helper" level when they had the intellectual ability to progress further.
3. Inservice training of vocational instructors in manual communication and orientation to deafness was generally neither intensive nor extensive enough to render most of them highly effective trainers of the deaf; but even if they had been, their student load was often of such size that they still could not provide the deaf students with sufficient individual attention.
4. Vocational tutoring and interpreting services in the vocational training areas were greatly needed. As a rule, although the deaf students could learn to perform the manual tasks of a vocation quite well, most of them could not name the tools, equipment and materials of their trade.
5. Because of the gross experimental and knowledge gaps as well as academic deficiencies, a great deal of each student's vocational training time was taken for scheduled communication training, special education (including basic language, arithmetic and measurements), discussion seminars, group counseling, and individual counseling. Content of these supportive services will be discussed later.

6. On-the-job training in the local community as a terminal training experience immediately following "completion" of Center vocational training courses was a vital experience for the students. On-the-job training comfirmed the students' readiness to seek a competitive employment position, gave them confidence in their abilities to perform the skill for which trained, provided them with an "employer's" reference for job seeking in their home area, gave them valuable experience in an actual work setting, and provided an opportunity to observe that not all "bosses" want the same job done in the same manner.
7. The need for specialized supportive staff who could communicate totally with deaf students was well documented. Numerous problems and conflicts arose in the training areas which required the assistance of project staff -- even in the training areas where the instructors served many deaf students over a period of years and had developed good manual communication abilities. One problem centered on "estimated date of completion" of Center enrollment. Upon enrollment in a vocational training program, each student, according to Center procedure, was assigned a date at which time it was anticipated that he would complete his training program. This date was determined for each training area by the instructor according to the length of time required by an "average" student with no interruption of scheduled training time to complete the course. It was explained to each student that he might need more time if other services such as special education, speech therapy, etc., were needed. Invariably, project clients were unable to complete their vocational training programs at the "estimated date of completion" due to their needs for vocational tutoring, special education, discussion seminars, group counseling, etc. When the expected date of completion arrived and they did not receive their training certificates, many of the students became irate; it became difficult to explain to them why they had to remain longer than their hearing friends in the same training area. This was an especially difficult if not impossible task for the low achieving deaf client. These clients believed that they were somehow being "punished". As a result of this problem, Center procedure was altered so that no "estimated date of completion" would appear on copies on any records given to the clients. Students were then told that they would probably finish in from 12 to 18 months, depending upon their progress and the amount of time needed for services in addition to vocational training.
8. Many of the students enrolled in vocational training actually were in need of full time personal, social, and work adjustment training. However, according to Center policy, all students had to be enrolled in one of three service categories: evaluation, vocational training, or medical. There was no service category which would permit a student to enroll on the basis of full time and long term personal, social, and work adjustment training, or full time services to upgrade academic levels. While some were served in the Prevocational Adjustment Training Unit of the Evaluation Section, enrollment there was limited to approximately 120 days. Therefore, many of these students were officially enrolled in a vocational skill training program to satisfy Center policy and to justify their remaining at the Center. A large number of these students were officially enrolled in laundry/dry cleaning because of their low academic levels, poor to non-existent communication abilities via any means, and the instructors' willingness and ability to work with these low achieving, and often multiply disabled deaf persons.
9. Ideally, vocational training instructors should be highly skilled in

communicating with their deaf students regardless of mode of communication required by the student. The backgrounds of the clients served in this project dictated that instructors be skilled in finger spelling and sign language. In addition to communication skills with the deaf, vocational instructors should be well oriented to deafness and to adaptive methods of presenting vocational training course content to their deaf trainees.

10. A great number of instructional media were needed for deaf students which were unavailable. At least one person could have served the program full time in the capacity of media specialist with responsibilities of: working with the project and regular Center vocational training instructors in developing tool charts; labeling equipment and materials; rewriting instructional manuals in simplified language; producing color slides, filmstrips, and movies for non-verbally instructing deaf persons in procedures and processes of their trade; developing dictionaries of trade jargon; and devising other materials to assist the Center vocational instructor and project tutor in imparting the skills and knowledge of vocational areas to enrolled deaf students.
11. The integration of deaf students into the existing vocational training areas was accomplished with relative ease. Most of the hearing students actually seemed excited about the opportunity to work alongside and with deaf students. A great many of the hearing students learned finger spelling and sign language. Problems did occur between hearing and deaf students in the training areas; misunderstandings developed over such matters as "bumming" cigarettes, responsibility for work assignments, lack of sensitivity to one another's pet peeves, idiosyncrisies, and needs. However, these conflicts were not unique to associations between hearing and deaf students. Vocational training instructors judged their deaf students to present no more and in fact probably fewer problems for them in the training areas than regular hearing Center students.
12. Most of the vocational training instructors judged their deaf students to require at least twice as much of their time as did hearing students.

Medical Services

Some routine or special medical services were needed by most of the students sometime during their enrollment. The Center offered infirmary first-aid and consultation services but medical treatment (with the exception of emergency dental services) or hospitalization were provided in the local community.

A number of students reported to morning "sick call" as many as 25 or 30 times during their enrollment; the usual ailments were upset stomach, head colds, headaches, nausea, abdominal pains, blisters on the feet, and toothaches. Several students required confinement to the Center infirmary for conditions including influenza, allergies, emotional upset, and ulcerated ankles. About a dozen students received emergency dental treatment; one received extensive dental treatment from a local dentist, financed by her local state rehabilitation agency. One student experienced serious urinary difficulties which were attended to during his enrollment. One quadriplegic deaf client received extensive medical services which included frequent and various medical examinations, medical dormitory housing, occupational therapy, and fitting for a right flexor hinge splint which allowed him to hold a pencil and write with one hand rather than laboriously holding a pencil with both hands and attempting to write in that manner. He was also fitted with a urinary collection bag which would permit a great deal more physical movement than the one with which he arrived at the Center. One student with brittle diabetes received 43 examinations for diet and diabetic control.

One student in laundry training was treated for a skin rash caused by a reaction to the detergent used in the laundry process; local physicians were asked to provide sutures to two students who cut themselves severely; one student was provided a tuberculin skin test locally; several students were examined by the Center ophthalmology consultant and four or five were fitted for glasses by local physicians; one student received frequent and long term treatment from a local dermatologist for a facial skin condition; and one student was hospitalized with a collapsed lung.

Various other medical conditions were presented by students which required attention from either Center or local physicians. The aforementioned ones give some indication of the medical service needs which occurred and of the type medical personnel required.

The Center physical medicine rehabilitation program was excellent. Only one deaf student, with a quadriplegic condition, was enrolled during the project for full time medical services with part time vocational evaluation requested when the physical condition of the client permitted. The fine medical services, equipment, and staff along with the specialized staff for the deaf seemed to render the Center an ideal location for services to deaf adults in need of medical rehabilitation as well as personal, social, and vocational adjustment needs. In the opinion of project personnel, there were surely many deaf persons in the Nation in need of these services but who were unaware of their availability. Limb fitting, gait training, and other related services were available but unused for deaf clients during the project.

Vocational Tutoring, Special Education and Discussion Seminars

The content of vocational tutoring, special education, and discussion seminar sessions often overlapped, and it was difficult to entirely separate or distinguish among these services. Generally, vocational tutoring was considered to include instruction which was specifically related to the students' areas of vocational training: learning the names of tools, equipment, and materials; studying some of the trade jargon of their respective vocational areas; learning and practicing routine arithmetic and measurement procedures involved in their work; and reviewing, with the tutor, the instructor's explanations and directives to ensure understanding of shop procedures and policies. This instruction was sometimes conducted in the vocational training area, but more often was accomplished in a classroom in the main Center building. This service required that the tutor and vocational training instructor work closely together; the tutor sometimes brought tools and materials from the vocational training area into the classroom so as to make the tutoring realistic and directly connected with the ongoing student work.

Special education services centered around instruction in basic language and arithmetic, However, traditional classroom methods were avoided when possible, and an attempt was made to relate instruction to immediate needs. For example, field trips were taken to notice and learn to read important public signs; and the need for arithmetic skills was encouraged by relating the use of these academic skills to the purchase of clothing and groceries; budgeting; and utilizing public transportation. Most of the students were weak in measuring skills, and instruction in this ability was included in special education sessions. Special education services also included finger spelling and sign language instruction to those students whose communication abilities via any mode were severely restricted.

The scheduling of students for vocational tutoring and special education services was based upon individual need, the availability of staff, and Center policy. It should be noted that students could be scheduled for a maximum of one or two hours per day of such services since existing Center policy required that the majority of the student's day must be spent in one of three basic Center service areas: evaluation, vocational training, or medical. There was no provision for student enrollment in fulltime personal, social, or academic enrichment programs. Most of the project students who were scheduled for vocational tutoring or special education sessions, then, were enrolled in vocational training programs; and when they were receiving such services, they were excused from their vocational training areas. Project tutoring and special (or basic) education services were provided to clients either individually or in small groups (three to six students). Bases for grouping varied. Sometimes grouping would be on the basis of general intellectual abilities; sometimes on the basis of communication skills; and sometimes the groups were heterogenous so that the less capable students could have a more adequate model of learning and behavior in the better students. Instruction in these sessions was nearly always communicated through finger spelling and sign language, although, due to the needs of a few students, the mode of instruction was speech, speechreading, and the liberal use of writing via pad and pencil or chalkboard. Sometimes communication was limited to gestures, pantomime, and pictures or diagrams.

The group discussion sessions (called Discussion Seminars) proved to be critically needed and highly valued by project clients. They were informal, but scheduled, small group sessions (6 to 10 persons) in which a great variety of topics orienting the students to the "world of work" and independent living were discussed. Each student who possessed sufficient communication ability was scheduled for at least one, and sometimes two, one hour discussion seminars weekly. For one period of time during the project, separate sessions were conducted for female students in addition to the general sessions in which both sexes participated. Topics during seminar sessions were dictated by students' needs and desires. Specific topics included the following: job finding; how to apply for a job; how to fill in a job application form; dress and appearance; worker responsibilities; employer demands; employer responsibilities; labor unions; payroll deductions; community service agencies, including public and private employment agencies; libraries, the YWCA, and the YMCA; marriage and family relations; dating; sexual matters; income tax filing; insurance; local housing topics including the relative costs and merits of various types of housing (apartment, boarding house, motel, renting a house, and buying a house); kinds of questions to ask oneself and a landlord when seeking housing; landlord obligations, rentee rights and responsbilities; budgeting; credit buying; use of public transportation; and banking. Project staff members utilized numerous methods and techniques to present these topics in a meaningful and impressionable manner: lectures; discussions; question and answer periods; filmstrips and color slides; guest speakers and discussion leaders; role playing; field trips; and demonstrations. Each session was evaluated for its need and effectiveness of presentation, and recommendations were recorded regarding repetitions of similar sessions for future groups of students.

The following conclusions were based upon the project experience of providing vocational tutoring, special education, and discussion seminar services to project clients:

1. The content of tutoring, basic education, and discussion seminar services were needed by the project clients. Their basic education levels were

disturbingly low for the amount of formal schooling they had completed; their knowledge of the world about them was severely limited and their readiness for independent living was obviously at a low level. Project clients were severely limited in information about the society in which they lived, information which most persons assume others know, but which had to be presented to these deaf persons in scheduled service activities.

2. While academic and general information needs of the project clients were attacked during the tenure of their Center enrollment, project staff could not begin to overcome these deficiencies in the time allotted; these students will have a continuing need for direction, assistance, and instruction after leaving the Center.
3. Personnel who provide tutoring, special or basic education, and seminar services must have a broad understanding of deafness and its possible implications as well as effective communication skills with deaf persons. While these services should be supervised by professionally trained persons, non-degreed counselor-aides and teacher-aides, with inservice training, can effectively serve deaf persons in these service areas. For example, the hearing female project counselor-aide, under the supervision of the professionally trained project staff, conducted the discussion seminars for deaf female students, and was quite effective. She also handled various aspects of tutoring and basic education services.
4. The availability of instructional outlines, visual instructional media, and numerous other material aids, adapted to the needs of low achieving, multiply disabled deaf persons were greatly limited. A qualified person could have served the project full time to develop and test the suitability of such materials.

Communication Services

Communication services included interpreting, assisting with telephone messages, and writing and interpreting letters. Project staff members who had interpreting skills were always on call and provided this service as needed by Center staff members, local professional and business people, and the students themselves. However, the students were encouraged to be as independent of this service as possible. Where they were involved with regular hearing Center students in the recreational areas, the student government, dormitory meetings, etc., they were encouraged to obtain the services of their hearing friends who had finger spelling and sign language skills. Illiterate and low achieving students were aided in writing to and understanding letters from friends and relatives. Nearly all of the students at some time during their enrollment, needed assistance with telephone calls home. Unless the project counselor needed to be involved in the communication, or communication with the student was quite difficult, students were encouraged to be independent of project staff in making these calls. Student needs for communicating with others were used as a teaching and learning device.

Interpreting services were provided during the first several months of the project by the counselor-coordinator; later by him and the newly employed evaluator; and during the final period of the study by these two plus the counselor-aide. Note should be taken of the need for hearing staff members to interpret for deaf members of the project staff.

Counseling

All counseling services to deaf clients throughout the project were provided by specialized personnel. The role of the project counselor for the deaf duplicated that of regular Center counselors, but he seemed to be more frequently and extensively involved in the provision of regular services to the deaf than regular counselors were in discharging their duties. In addition, due to the unique needs of deaf clients, the counselor for the deaf had responsibilities which regular counselors did not have.

Neither of the two counselors who served the deaf during the tenure of the project were professionally trained as counselors. They both were trained and experienced teachers of the deaf who were informally oriented for counseling roles through in-service experience and training at the Center. Their roles could be better described as case managers and teachers than as counselors. "Depth counseling" and psychotherapy services were unavailable for project clients.

In keeping with Center policy, each client was assigned to a Center counselor -- in this case the counselor for the deaf. During the client's enrollment, the counselor functioned as his case manager, program coordinator, and personal, social, and vocational counselor. Center services could be initiated only with the authorization of the Center counselor and payment could be made only for those services which he authorized. The Center counselor represented the client's state rehabilitation agency field counselor. Any action taken or services authorized by the Center counselor were done with the knowledge and authorization of the field counselor. Therefore, one of the responsibilities of the Center counselor was to establish and maintain close and frequent communications with field counselors regarding the progress and needs of the client.

The Center counselor served as the communication focus for Center students. It was his responsibility to handle all communications with sources outside the Center regarding current or former students. Medical, training, casework, and special reports for other agencies; recommendations for employment; and any other such information requested by external sources was released only through the Center counselor. Also he obtained pertinent case information from the various Center departments in which students received services, and he monthly compiled these reports into meaningful case narratives for the Center's Central Files Office and the referring field counselor. He also had the responsibility of keeping the various Center staff members who served the student advised of case information which would assist them in more adequately understanding and effectively serving the students. The counselor was authorized to terminate a student's program when he deemed it necessary.

In the judgement of the counselors for the deaf, most of the services they provided paralleled those available to hearing students, but many of the services required only occasionally by hearing students were needed more frequently by deaf students. Frequency of: (1) contacts with Center service personnel; (2) assistance with travel arrangements; (3) local help with the purchase of clothing; (4) closer contact with local employers providing on-the-job training; and (5) assistance in making appointments with local medical and paramedical persons for services, seemed to be more extensive for deaf than hearing students.

The one definitely unique service performed by the counselors for the deaf was interpreting. They interpreted in numerous settings: for Center and local community medical persons; for student assembly programs; for Center graduation ceremonies; for student council meetings; for dormitory floor meetings; and for instructors in the vocational training areas. This was a vital service which had to be provided and which often fell to the already overburdened counselors. For much of the project period, they were the only members of the project staff who had interpreting skills.

Another service performed by the project counselor was the conduct of group counseling and discussion seminar sessions. (Prior to the termination of the project, the Center initiated a group counseling program for all regular Center students.) The group counseling sessions were unstructured meetings in which students raised any topic of discussion they wished. The material discussed was sometimes of an affective and sometimes of a cognitive nature. The counselor found that the best sessions were those which took advantage of "crisis" situations involving deaf students as they occurred. For example, an excellent counseling session took place after a deaf student volitionally left the Center after breaking up with his hearing girl friend. The discussion seminars were didactic in nature with the counselor determining needs and structuring the content of the sessions to meet the needs.

Due to the large caseload of the counselor -- sometimes as many as 40 persons; the numerous details of case management; the amount of time and attention needed by so many of the students; and the interpreting duties, the project secretary was assigned some counselor-aide duties on an experimental basis. In-service training, both formal and informal, provided this person with sign language instruction and orientation to deafness and the needs and problems of project clients.

Findings in the area of counseling the deaf at the Center during the project include:

1. Staffing was not adequate for meeting the counseling needs of project clients: (a) many of the students were in need of "depth counseling" or psychotherapy, and no staff were available with the training and experience background to provide this service; and (b) the numerous details of the casework required of the counselor, and the necessity for the counselor to be involved in providing interpreting services required a great deal of the time the counselor needed for providing personal, social, and vocational counseling. Much of his "counseling" was crisis oriented rather than preventive -- that is, he often did not have time to deal with a student's needs until the need became so great that the student "got into trouble" or experienced training problems or became so frustrated that progress in his Center program ceased or regressed. Relatively few students were maintained on an extended period of scheduled counseling sessions. A caseload of 35 to 40 students was too many for adequate rendering of the services the counselor was expected to provide. Project personnel judged that a counselor/student ratio of 1 to 15 was maximum for the provision of effective case-management, service coordination, and counseling services to the type clientele enrolled.
2. Group counseling sessions and counselor-led discussion seminars seemed vital to the personal and social development of the clients.
3. Project personnel concluded that case management and personal, social and vocational counseling services should have been provided by two different persons. Case management could be handled by a counselor-aide or a trained teacher of the deaf in consultation with the professional counselor; counseling services should be provided by a person who is professionally trained for that service and who also has a background of preparation to work with deaf persons.
4. A hearing person without a degree can function quite satisfactorily as a counselor-aide for the deaf through in-service preparation and with professional supervision. The counselor-aide can adequately handle case-

management responsibilities, interpreting, administration of group psychological and academic achievement tests, conduct of group discussion seminars, and a host of other tasks, thus relieving the professional counselor for more intensive direct contact with students.

5. The severe communication limitations of many project clients precluded traditional counseling methodology; face to face confrontation utilizing verbal or manual communications with these persons was impossible. For these students, "counseling" consisted of the immediate availability of the counselor when a critical experience of the student occurred which could be dealt with through non-verbal communication -- gestures, pantomime, and drawings. A great deal more was accomplished through these communication means than was initially thought possible by project staff. In these instances, the counselor served as a facilitator of both affective and cognitive learning. If the counselor was unavailable as these situations arose, an opportunity to assist the low achieving, multiply disabled student was lost. This further indicated the need for a low counselor/student ratio when many such deaf persons are included on a caseload.

Speech Training and Therapy

Students were encouraged to use speech and speechreading skills in all areas of their Center programs. A few possessed excellent speechreading skills, and several had readily understandable speech. Project staff members noted that many of the students who reportedly seldom used speech abilities prior to Center enrollment increasingly utilized this ability at the Center; they changed from holding up fingers to indicate to the elevator operators which floor they wanted, to calling out the number orally; they stopped writing their orders for food in the Student Union and began orally stating the items they wanted. Staff members who were interested in learning sign language were instructed to encourage students to use their "oral" skills (speech and speechreading) where these skills were adequate for communication.

Only a few students were provided speech training and speech therapy during their enrollment at the Center. Most of them had years of such training behind them, and the staff felt that such services during a six to twelve month Center enrollment would benefit them little. Short term speech training was provided by the project staff for a few of the moderately "deaf" students who had little or no previous formal specialized schooling; the regular Center speech therapist evaluated 12 to 15 students who requested speech therapy to determine prognosis for benefit from such services. She scheduled and served about eight project students. While several students were encouraged to enroll for speech therapy, this service was provided only if they desired it.

Recreation

The Center provided an excellent supervised recreation program for all students, including trips, tours, picnics, intramural and intercity sports activities, various indoor games, television, scheduled movies, parties, dances, ceramics, painting, leathercrafts, swimming, library, pool, ping pong, bowling, and shuffle board. Project clientele were free to participate in these activities and to use local community recreational resources.

No specialized personnel were employed in the recreation program to serve deaf students. The regular four or five recreation staff members were expected to serve them on the same basis as normally hearing students. Some of them learned to communicate quite well manually and some did not. Some took an active interest in working with deaf students, some did not. Several of the deaf students, both males and females, became popular with the entire Center student body through participation in Center sports activities -- basketball, softball, volley ball. These teams played scheduled games with church league and business league teams, and deaf students were sometimes recognized as the Center's star players.

Hearing students often assisted deaf students in group activities, for example, "signing" or writing the call numbers during bingo games. In spite of the acceptance of deaf students by both hearing students and regular staff members in the recreation programs, project staff believed that deaf students did not participate in the recreation programs as much as they would have had all of the Center students been deaf or had there been a specialized recreation staff person to interpret for the deaf in group activities, to teach the rules for games, announce upcoming activities, and to generally encourage the deaf students to participate and to regard the recreation programs as a learning opportunity.

Housing

At the outset of the project, housing was provided for both regular and project clients on the Center grounds. Accommodations were dormitory style, usually with two or three students assigned to each room; some of the large rooms were occupied by four students; and also, some single rooms were available for students whose conditions required rooming alone. Three floors of the main Center building housed male students with one housemother assigned to supervise each dormitory floor. A separate, three story building housed female students with one housemother assigned to the building.

Room assignment of project clients was generally such that no two deaf students roomed together. The rationale for this "forced integration" approach was based upon several factors: (1) many young deaf adults enrolling at the Center had never had the experience of learning to adjust on an intimate basis to hearing persons outside the sphere of family and close friends; (2) the vast majority of the hearing clients of the Center had never associated with deaf people; (3) a safety factor was involved -- in case of any kind of need for alarm, the hearing student could alert his deaf roommate; and (4) the opportunity of experimentally investigating an integrated housing approach seemed worthwhile.

To experimentally evaluate the integrated housing situation, a test of attitudes toward the deaf and deafness (Cowen, Emory L., and others, "Development and Evaluation of An Attitudes to Deafness Scale," Journal of Personality and Social Psychology, 6:183-191, May, 1967) was modified and administered to a sample of hearing students upon their enrollment at the Center; half of them were assigned randomly to deaf roommates and half were assigned randomly to other hearing students for roommates. In addition, during the first few days of their first week of enrollment at the Center, each of them was asked to fill in a brief questionnaire asking whether they had deaf friends and whether they knew finger spelling and sign language. After a period of twelve weeks, these same two instruments were readministered.

Results, attitude test:

> Assuming that the attitude test was valid, both groups revealed positive attitudes towards the deaf on the pretest and statistically significant increases in attitudes towards the deaf after a three month

period of Center enrollment. However, rooming with a deaf student apparently made no difference in attitude test scores; there were no statistically significant differences between the mean scores obtained by the two groups on either the pre- or post-test administrations (t value with 13 degrees of freedom for pre-test mean scores was 1.308; for the post-test, 0.2466; the inflated t value for the pre-test means, indicating a tendency for the group of hearing students who had deaf roommates to score higher than the other group on the pre-test, was attributed to "contamination" -- these students had from one to three days of experience living with deaf roommates prior to taking the test and thus had an advantage of earlier intimate contacts with deaf students.)

Results, questionnaire:

The responses of hearing students (who had deaf roommates) to the first administration of the questionnaire were contaminated for the same reasons explained above regarding the administration of the attitude test -- these students had already experienced from one to three days of living with a deaf roommate prior to filling in the questionnaire. Nevertheless, the results clearly indicated that hearing students who had deaf roommates were more likely, after a three month enrollment period, to claim deaf persons as friends and to have made a greater effort to learn finger spelling and sign language. Due to the mentioned contamination, statistical treatments for significant differences were not undertaken. However, Table IX leaves little doubt of the positive effect of deaf persons on their hearing roommates.

TABLE IX -- RESULTS OF PRE- AND POST-ADMINISTRATION OF QUESTIONNAIRE TO RANDOM SAMPLE OF HEARING STUDENTS REGARDING WHETHER THEY HAD DEAF FRIENDS, HAD LEARNED FINGER SPELLING, AND HAD LEARNED SIGN LANGUAGE (N=28)(1)

Time of Questionnaire Administration	Had Deaf Friends		Had Made Effort to Learn Sign Language		Had Made Effort to Learn Finger Spelling	
	Group I (1)	Group II	Group I	Group II	Group I	Group II
At Enrollment	42% (2)	6%	29% (2)	0%	22% (2)	6%
After three months	100%	54%	72%	60%	86%	67%

(1) Individuals in Group I were assigned to deaf roommates at enrollment; those in group II had only hearing roommates during their enrollment.
(2) Note that subjects in Group I had already roomed with a deaf student from one to three days prior to completing the questionnaire.

The experience of integrated housing for deaf students revealed reciprocal benefits for hearing and deaf students. Deaf students unquestionably developed friendships with hearing persons which would have gone undeveloped without the integrated housing experience. A large number of hearing students would not have taken the effort to become acquainted with the deaf and learn sign language had they not roomed with a deaf person. There were less than one-half dozen cases of hearing persons who had deaf roommates requesting to change rooms, and this was attributed to the behavior and personality of the deaf person or of the hearing person rather than to the hearing loss. Few deaf persons officially requested to change from hearing to deaf roommates. Deaf students did prefer rooming with other deaf students and they questioned why they were not permitted to do so. When the matter was explained, they willingly accepted the project housing policy; however, they stated a desire to have rooms in the same area of the dormitory. Several of the deaf students commented on the benefits which accrued to them as a result of having hearing roommates. One stated that she had no idea how much noise she made and its negative effect on hearing persons. She was grateful for the opportunity of having a roommate who helped her live more quietly and in so doing become less offensive to hearing persons. Deaf students took pride in helping their hearing roommates learn sign language, and this seemed to contribute to a more positive self image.

Project personnel noted that deaf females seemed to have a greater desire to room with one another than did deaf males -- or at least they expressed themselves more frequently. The female students seemed to have a greater need or desire for associations in the dormitory rooms at night to discuss the day's activities. The housemother for the women's dormitory reported more frequently than other housemothers that the deaf women congregated at night in the dormitory to visit and that it was sometimes difficult to break up the group and send them to their dormitory rooms before "lights out".

One serious problem developed in the men's dormitory as a result of the loud noises the deaf men made in the area. The deaf students' "hollering" and "excessive door pounding" irritated a large number of the hearing men, and they determined to do something about it. Representatives talked with the deaf students about the situation, but the problem persisted. Some of the hearing students then decided to settle the matter "physically", but the tension was resolved when staff members learned about the crisis and talked with both groups. The situation became a learning process for both the hearing and deaf men.

Housemothers were in agreement that their deaf students were generally among their best students. Most had a long history of dormitory living and were better than most hearing students in housekeeping activities. With the exception of occasional excessive noise and misunderstandings due to communication difficulties, those students whose primary disability was deafness presented no dormitory problems. The housemothers did find a need to give more frequent and more individual attention to deaf students in orienting them to dormitory life and in informing them of changes in procedures, meetings and so forth. Deaf students with Center experience assisted in the orientation of new deaf students to a great extent.

The policy of integrated housing was flexible. In a few cases, low achieving, severely culturally disadvantaged deaf enrollees who had little if any experience adjusting to either deaf or hearing persons were placed with a deaf roommate. In these instances project staff members determined that the student's adjustment to the Center and his social and personal growth would be facilitated by having a deaf roommate.

While all housemothers received several hours of finger spelling and sign language instruction, only one or two developed sufficient proficiency for fluent manual communication with their deaf residents. In spite of this, most of the housemothers seemed to establish excellent rapport and some means of adequate communication with the deaf students.

During the course of the project, the staff realized that project clientele could not be prepared adequately for independent community living by providing all housing services on the Center grounds. They needed to experience such living, with assistance. Just talking about the "how to's" of finding an apartment, budgeting personal income, preparing meals, using public transportation for commuting to work, opening and using a checking and savings account, etc. was not getting the job done. Therefore, near the close of the project, the Center Administration was asked to alter the policy (which had been quite rigid) requiring that all Center students must reside on the Center grounds to allow suitable preparation of deaf clientele for independent living. Permission was granted. A handful of project students were selected and assisted in locating local housing. They continued their Center training programs as usual and could take meals and participate in evening and weekend recreation programs at the Center. However, they were assisted by project staff members in the numerous aspects of developing responsible independent living behavior, and they were encouraged to become increasingly independent of the Center for meals, recreation, laundry services, etc. This approach was continued for deaf persons who remained enrolled at the Center after the project terminated, and a later report will describe this approach and its effectiveness in detail.

The housing experience during the project resulted in the following findings:

1. Integrating deaf persons into the Center housing service was quite feasible; it was accomplished without fanfare from students or staff.
2. The policy of requiring that no two deaf persons room together seemed to work well; both deaf and hearing professionals who visited and evaluated the program supported this policy as a general concept.
3. Problems were presented by deaf students in the housing areas, but according to the housemothers, "no more, and possibly less, than problems presented by hearing students." The usual problems included horseplay, pranks, disagreements among roommates, rule breaking, etc. The major annoyance unique to the deaf students was the excessive amount of noise they made. They would yell at one another in attempts to attract the attention of a deaf person at the "other end of the hall" who had some residual hearing; when visiting another deaf friend at his room and the hearing roommate was not present, they would pound on the door or kick the door in an attempt to attract the attention of the person inside; they would unknowingly bang drawers, doors, and other items in the room.
4. Housemothers would occasionally call "wing meetings" or meetings of the students on one dormitory floor to discuss problems appearing on the floor, to make general announcements, or to present a change in policy or procedures. Interpreting service was needed by deaf students during these meetings but was not always available. Sometimes project staff members would attend to interpret, and during various time periods of the project, hearing Center students had learned sign language well enough to interpret for their deaf friends. Many times the meeting would be called with short notice and interpreting services would not be available. Housemothers reported, however, that even when interpreters were present the deaf students often didnot understand or remember the announcement or discussion and it was usually necessary to talk with the deaf students individually to assure that the information of the meeting was communicated to them.
5. There was no question but that the Center housemothers extended themselves beyond what could have been expected in serving deaf students. However, while regular housemothers served deaf students well, project staff felt that they could have been of more assistance and more effective if they had more thorough orientation to deafness and more proficient manual communication ability. Project staff members undertook no special services to deaf students in the dormitory areas. The counselor for the deaf was on call 24 hours a day as were all Center counselors. He found himself called occasionally to the dormitory areas late at night or during early morning hours to lend assistance to the housemother in communicating with

deaf students who were upset, or who had an argument with another student (hearing or deaf), or who were guilty of some flagrant breach of regulations.

6. The program, initiated toward the end of the project period, of utilizing local housing as a learning experience for students who had previously been dependent upon schools and parents was excellent. Moving students who were ready into local housing provided visible evidence to the student and staff that the student was making progress in learning and maturation, and provided additional opportunities for him to learn to live independently.

Placement

Responsibilities for placement services rested with the state rehabilitation field counselor who referred the student to the Center. He was kept informed of his client's personal, social, and vocational training progress by means of regular monthly reports. In most instances, the Center counselor was in direct telephone communication with the field counselor prior to the student's completion of his Center training program. The field counselor was asked whether he had any specific placement possibilities in mind for the client and if there were any specific skills or information which could be imparted to the student in the Center training program, prior to his discharge, which would render him more employable for a specific setting or employer. Special education sessions and discussion seminars were utilized in attempting to prepare the students to secure employment independently, but many still needed a great deal of assistance in locating employment.

Several of the field counselors worked splendidly with their clients in job finding efforts by arranging job interviews before the clients left the Center. Other counselors, for one or a combination of reasons, provided little or no placement assistance. Some students who successfully completed training were known to have been totally without placement services after termination of Center services; they either remained unemployed or accepted underemployment. To the chagrin of both Center and field rehabilitation personnel, some students refused to leave their home areas for employment immediately after completing training and therefore remained unemployed until they decided to move to a larger town or city.

FOLLOW-UP

Follow-up information on each of the 103 discharged students was secured from three to six months following termination of their Center programs. Table X summarizes the statistics accumulated. The table shows that 40.7% of those discharged were known to be employed in competitive jobs at the time that follow-up information was reported; 5.8% were working in sheltered situations; 12.6% were reportedly unemployed but had held jobs subsequent to Center discharge; 20.3% were known to be unemployed and had no post-Center jobs (this figure excludes homemakers, those who returned to state hospitals for the mentally ill, and those who were involved in post-Center rehabilitation training programs); and 8.7% could not be located after Center discharge.

Of the 57 persons who completed Center vocational training programs, 35 were known to be employed full time in competitive jobs at the time follow-up information was obtained; three were employed full time but in sheltered settings;

TABLE X -- FOLLOW-UP OCCUPATIONAL STATUS OF 103 STUDENTS WHO TERMINATED HSRC SERVICES DURING VRA RESEARCH AND DEMONSTRATION PROJECT NUMBER RD-1932

Discharge Status	Follow-Up Employment Status								
	1	2	3	4	5	6	7	8	Total
Completed Training Program Certificate Awarded	35	3	8	6	1	2	-	2	57
Completed Evaluation Program With No Further HSRC Services	1	-	1	5	-	-	-	1	8
Volitionally Terminated From Training Program	3	-	-	2	3	-	-	4	12
Volitionally Terminated From Evaluation Program	1	-	1	4	-	-	-	-	6
Discharged Due to Behavior Problems	1	1	2	1	-	1	1	-	7
Discharged Due to Mental or Physical Problems	1	2	3	3	-	2	2	-	13
Total	42	6	15	21	4	5	3	7	103

*Numbers indicate the following:
1=Employed full time in a competitive job
2=Employed in sheltered situation
3=Unemployed at the time follow-up data were collected but had post-HSRC work experience
4=Unemployed and without post-HSRC work experience
5=Homemaker; unemployed outside the home
6=Receiving post-HSRC rehabilitation training services
7=Returned to state hospital from which referred to HSRC
8=Whereabouts unknown; no information available

eight were unemployed at the time follow-up information was secured but they had held post-Center full time jobs (these eight were known to have somewhat severe personality and adjustment problems); six were unemployed and had not worked since leaving the Center; two were receiving additional vocational training -- one on-the-job and the other in a sheltered workshop; one was a full time homemaker with post-Center work experience; and finally, no information could be obtained on two of those who had completed training.

Of the 35 former students who had completed vocational training courses and who were employed, 78% (29) held jobs in the same or related vocational area for which trained at the Center; seven wanted jobs in the same area as trained but had to take jobs in other areas because immediate employment in their desired field was not available; and one preferred employment in an area other than that for which trained at the Center -- the stated reason was that he took training in a field urged upon him by his parents rather than of his own choice. Five of the seven students who were employed in vocations other than that in which trained received preparation in printing skills; one was trained in sewing; and one completed a woodworking course.

Of the six persons who completed Center vocational training but had not yet been employed, one was trained in each of the following Center areas: cafeteria food service, meatcutting, printing, and laundry work; and two were trained in sewing --one in drapery and slip cover making and the other in drapery, slip covers, and dressmaking. Each of these six persons had attained skills only at a level considered minimal for issuing a Center training certificate. At the time of their graduation from the Center programs, project staff judged that four of these persons would have difficulty securing full time competitive employment due to a common characteristic of slow production rate. One of these four persons tended toward hysteria evidenced by psychosomatic complaints and one, past middle age, was adversely affected by arthritis. In spite of these problems, there was evidence that each of these four persons could at least fill a sheltered work position. One of the six individuals who was not employed was judged to have salable competitive skill and worker characteristics in the printing field but would not leave his home area at the time follow-up investigations were conducted; and also -- and probably more significant -- his family structure provided no rewards for its members to seek gainful employment.

Eight persons were discharged from the Center having completed a minimum of 30 days of evaluation but did not remain at the Center for additional services. Of these eight persons, only one was reported to be employed in a full time, competitive job; one was receiving a salary for on-the-job training experience which was to lead to full time employment; five were known to be unemployed and without work since leaving the Center; and no information was available for the other person.

Among the 12 students who discontinued training programs of their own accord, three were homemakers, three were employed competitively, two were unemployed, and the whereabouts of the others were not known.

Of the six persons who enrolled for evaluation services but who prematurely terminated their programs volitionally, only one was employed at the time the follow-up information was obtained.

Among the seven students who were classified as discharged due to unacceptable behavior, only one was employed in a full time competitive job when follow-up information was collected; one was doing janitorial work in his father's business; one returned to the state hospital from which she had been referred; one reenrolled at the Center after 18 months of idleness at home; two had found jobs after leaving the Center but at the time follow-up information was available they were unemployed; and one had never worked since leaving the Center.

Of the thirteen students who were discharged because of their mental or medical conditions, two were returned to the state hospitals from which they were referred to the Center, and the other 11 were returned to the care of their parents.

STUDENT AFFAIRS

The Center students had quarterly elections for various student body government offices. Deaf students participated in these elections as candidates for office, and some won such positions. During the project period, one of the young deaf men was elected to the position of sergeant-at-arms; an older deaf woman was elected as a dormitory "wing representative"; and one young deaf man was voted into a similar office representing his dormitory wing. In spite of language difficulties, one of the deaf women in offset printing training was elected to the editorship of the Center's student newspaper. During these campaigns for office, the deaf students faced the student body and presented a brief speech either having hearing students read it for them or "signing" it and having hearing students interpret the speech orally for the hearing persons present.

Some mixed dating occurred between hearing and deaf students. For most individuals in both groups, this was the first opportunity to date one another. Some of the dating became quite tumultous. At least two deaf male students volitionally dropped out of Center programs when the hearing students they were dating ended the romance. One of the deaf female clients and one of the deaf male clients married the hearing Center students they dated subsequent to the completion of their Center training programs. Of course there was dating among the deaf students and at least three marriages occurred after Center discharge as a result of friendships which developed at the Center.

While hearing and deaf students were physically integrated in every Center service area, extensive, intimate, and voluntary social integration among hearing and deaf students was not evidenced. Several of the deaf students did develop close, permanent friendships with hearing students, but this seemed to be the exception rather than the rule. Too, some of them at times ventured into the social cliques of the hearing students, only to withdraw once again into the security of the deaf group. Center staff members judged that most of the deaf students were socially withdrawn from hearing students during their leisure hours and that where deaf and hearing students developed intimate friendships, the hearing person seemed to adapt more to the needs of the deaf person than vice versa. Center staff members also commented that the deaf students seemed to reject the attempts of many hearing students to attach themselves to their social cliques; whether this was due to personality deficiencies in the hearing person could not always be determined. Project staff members noted that the deaf students regularly congregated in one area of the dining room for each meal, and usually could be seen in large groups in the Student Union of the Recreation Floor sometime during each evening. Project staff considered this grouping up as positive, and no attempts were made to discourage this behavior. In some recreational activities deaf students excelled to the point that they were accorded a great deal of acclaim by their fellow students - hearing and deaf.

Several of the project clients needed or wanted extra spending money and held part time jobs during their Center enrollment. Several part time jobs at the Center were filled by students who wanted to work during free hours. These included elevator operation, game room work on the recreation floor, student laundry work, and student union food service work. Also, a number of the deaf male students found jobs in the local community. Most of these jobs were as bus boy in the hotels or as a dishwasher in cafes and restaurants. While project staff were usually always involved in assisting students with securing part time jobs on their own, these part time work experiences were encouraged so long as they did not interfere with the students' Center training programs. In addition to earning extra, or in some cases their only, spending money, students seemed to benefit a great deal in other ways from these part time work experiences. Those who were employed at the Center were followed up quite closely. Staff work supervisors filled in regular reports on these students and the counselor attempted to utilize these reports and the students' experiences as learning situations. Matters involving lack of punctuality; failure to notify the supervisor of unavailability for work; misunderstandings regarding method of payment for work; and other problems arose, and with the assistance of project staff members, were learning experiences for the student. Students who worked in town also presented and had presented to them on-the-job problems; however, project staff members often did not know of those matters until the time for possible staff involvement had passed.

Project staff members debated whether to introduce a separate Center "club" for deaf students. At only one period during the operation of the project did the deaf students themselves request such an activity and they were discouraged from doing so. The background for this negation lay in Center administrative policies to promote total integration of all Center students regardless of race, religion, cultural background, or disability.

Problems can be expected to arise in an institutional setting where 300 to 400 or more persons live in close proximity 24 hours a day. The Center in which this study was conducted and the students served were no different. A number of project students presented tremendous problems of adjustment and behavior challenges for project and regular Center staff. A window was broken in a fit of anger in the training area; wrists were slashed at least superficially when the hearing student a deaf male had been dating jilted him; interns from the medical department were needed to provide physical restraint when a student became severely upset during a counseling interview; mentally retarded and mentally ill students refused to hold to a schedule and would wander away from their scheduled activities; the arm of a stuffed chair was torn apart by one student in the counseling office; students experienced total rejection by their deaf peers; and serious situations developed with drinking, sexual promiscuity, and stealing. The behavior of many project clients was less mature than expected by most staff members and other students. A common complaint of hearing students was the "horseplay" and cutting in line by the deaf students in the cafeteria, and "horseplay" around dangerous equipment in the training areas. These matters were not unique with the deaf; they were not at all unlike many of the hearing students at the Center.

COSTS

Charges for Center services to project clients were made on the same basis as for regular Center students. These charges included tuition, maintenance, and for those in vocational training programs, books, tools, and supplies. Also, most students incurred some charges for miscellaneous medical services; charges were made for medication dispensed from the Center infirmary and for medical supplies needed by the students; a $50 deposit was required for these needs but the bulk of this amount was usually returned to the depositor. Tuition was slightly higher for students enrolled in evaluation status than for those in vocational training status; this charge included the services of all staff members required to meet the needs of the student. Maintenance charges covered housing and meals and routine infirmary services up to 30 days.

The costs of Center services for the 57 project clients who completed vocational training programs were totaled and are presented in Table XI. Note that these figures include only costs of Center tuition, maintenance, and books, tools, and supplies needed in vocational training areas; medical expenses were negligible and are not included. Also, note that the costs of transportation to and from the Center, spending money, clothing, and local medical treatment are not included in the figures; these were considered non-Center service costs and were always borne either by the client, his family, or his sponsoring state rehabilitation agency. The cost of services actually provided within the Center were borne mostly by the Arkansas Rehabilitation Service and case service monies made available through the VRA grant award for the project. In summary, the average cost of tuition, maintenance, tools, books, and training supplies for the 57 students who completed center vocational training was $2,411.64.

TABLE XI -- COSTS OF CENTER SERVICES FOR PROJECT CLIENTS COMPLETING VOCATIONAL TRAINING COURSES (N=57)

Service Charge	Total Expenditure	Average Cost
Tuition for Evaluation (1)	$13,700 (1)	$ 342.50 (1)
Tuition for Vocational Training	$76,970	$1,350.35
Total Tuition Charges	$90,670	$1,590.70
Maintenance	$46,794	$ 820.95
Books, Tools, Supplies for Vocational Training Courses	$ 1,489.60	$ 26.13
Total Charges for all Center Services, Excluding Medical Charges	$137,464	$2,411.64

(1)Only 40 of the 57 students who completed vocational training courses received Center vocational evaluation services.

STAFFING

Difficulty was experienced in filling project positions with professional persons trained to serve deaf clients. The critical shortage of trained personnel and the low salary schedules of the state (to which adherence was mandatory) were considered the primary reasons for this difficulty. Until persons trained in the area of deafness could be secured, non-specialized personnel were employed in the project program. As specialized personnel were obtained, the non-specialized persons serving the deaf were assimilated into the regular Center operations.

The project director was the Supervisor of the Center Student Service Department; he supervised counselors, recreation staff, and housemothers, and was responsible for their service programs. He was also responsible for student discipline, and he served as chairman of the Center Admissions Committee. He had been at the Center during the operation of the pilot study with the deaf and had worked with deaf students directly and indirectly in that study. His training background was in psychology at the master's degree level. He served as director throughout the tenure of the project.

The project coordinator-counselor was trained as a teacher of the deaf at the master's degree level. He was coordinator of the Center pilot study with the deaf and had conducted the Southwest Survey of Young Deaf Adults (VRA Project RD-1652). He served as counselor for the deaf in addition to coordinating duties until about 20 months into the project at which time another project member was ready to assume full responsibility for counseling services for all project clients.

The psychometrist-evaluator initially employed to serve project clients had experience in providing vocational evaluation services to deaf adults at the Center in the pilot study. He had developed some degree of proficiency in manual communication, and his familiarity with evaluation procedures with hearing and deaf persons, including job sample testing was invaluable. His services were needed in the regular Center program so approximately eleven months after the project began, he was replaced with a person holding a master's degree who was a trained teacher of both the deaf and the deaf-blind.

The new project evaluator was oriented to evaluation procedures through in-service training at the Center. Due to the critical need of project clients for vocational tutoring and special education services, this person's function was extended to provide these services. The need for another counselor was critical and he began counseling duties approximately six months after joining the project staff following a period of in-service orientation to case management and counseling.

The project counselor-aide had been prepared for her role through in-service training in the pilot study. She had originally been employed as a secretary and had worked with the counselor for the deaf. She left the program for the deaf to join another project being conducted at the Center relating to the use of counselor-aides for regular Center clients. She was replaced by the woman who was hired for the project originally as secretary but who had been prepared for the project counselor-aide role.

One year prior to the termination of the project, the first deaf person was employed as a project staff person. He was a graduate of Gallaudet College and the Arkansas School for the Deaf. His immediate past employment was with the Arkansas School for the Deaf as a vocational instructor but he also provided tutoring and special education services to project clients. As a part of his in-service orientation to Center evaluation procedures, he was assigned as evaluator for a handful of normally hearing students.

The need for additional staff was readily apparent, but funds and personnel were limited. To help meet the need, one experienced teacher of the deaf was employed for each of the two summers of the project period. One retired deaf teacher of the deaf was employed for a three month period during the winter of the last year of the project. These persons performed a number of tasks which included developing materials for use with the students, providing vocational tutoring and special education services, conducting discussion seminars, interpreting, and assisting with in-service training for regular Center staff members -- primarily providing scheduled sign language classes.

The extensive need for special and basic education instruction, vocational tutoring, and the conduct of Discussion Seminars demanded that at least one person direct his energies to providing these services full time. Therefore, during the latter stages of the project, a trained teacher of the deaf, herself deaf, was employed on a full time, permanent basis as "special education instructor" for project clientele. The lack of adequate and appropriate materials was so great that during the first several months of her employment, she spent approximately one-half of her time developing and testing materials. The development of these materials was still in progress as the project terminated.

No specialized personnel were secured for the following service areas: medical, dormitory, recreation, vocational training, and the supportive service areas such as food service, maintenance and housekeeping. Staff members in these departments served deaf persons on the same basis as hearing persons. Some learned sign language quite well and others never developed manual communication skills. Project staff members provided interpreting services to both staff and deaf clients when necessary, but in few instances was this service provided on a scheduled, routine basis.

The following conclusions regarding staffing patterns were based on the project experience:

1. The critical areas of Center service requiring specialized staff who were prepared to serve the deaf included counseling and case management; vocational evaluation; vocational tutoring; and instruction in basic language, measurements, and arithmetic. While project services to the deaf continued without a staff psychologist, experienced in working with deaf persons, the availability of such a person would have been invaluable for both service to clients and for in-service training of both project and regular Center personnel.
2. Great difficulty was experienced in staffing the project with persons trained in the area of deafness. As student needs became more apparent, and the need for a lower staff/student ratio was realized, additional personnel were sought but not found. If salaries had been a great deal higher, there was evidence that persons trained in the area of deafness could have been secured. However, state agency salary schedules had to be maintained for project personnel. Without exception, each project staff member had a personal attachment to the State of Arkansas and was willing to work for available salaries. In retrospect, instead of maintaining the established project staff level because trained people willing to move to the State could not be located, in-state persons with training and experience in

the desired professional areas should have been employed and then trained through in-service and available short term VRA sponsored, "orientation to deafness" training programs.

3. Flexibility of function was a key to effective use of project staff. For student needs to be met, service schedules had to be revised frequently and staff responsibilities and functions altered accordingly. For example, at one time eight to ten project clients were enrolled in the evaluation unit at the same time. A full time evaluator was needed to serve them. However, at other periods there were only one or two deaf students in that service area. During these periods, the evaluator was scheduled part time to provide vocational tutoring or to lead discussion seminars. At times, non-specialized staff were utilized for special education services for the deaf, and it was necessary for the project counselor to work more closely with the regular staff members in the provision of that service. When summer staff were utilized, alterations in schedules of services offered by the permanent project staff were effected.

DEVELOPMENT OF INSTRUCTION MATERIALS

The project staff found few commercially produced instructional materials that were suitable for the majority of the project clients. There was a critical need during the project for a full time instructional specialist whose assignment would be to locate, develop, and test instructional aids for use with project clients. Project staff personnel could devote only limited time to the formal production of these materials due to their myriad other duties in the operation of the project.

Members of the project staff did note numerous specific instructional materials needs, and they worked on these ideas as time permitted. One semiformal publication resulted from project staff efforts, Dictionary of Job Application Form Terms for Deaf Adults. This was a pilot effort to develop both a guide for the instructor and a reference source to assist deaf persons in properly responding to questions and requests for information contained on most job application forms. The production of this document involved a review of dozens of job application forms utilized by various private and public employment agencies, and businesses and industries. Terms which were judged difficult for low achieving deaf persons to understand were noted for inclusion in the "Dictionary." In the publication itself these terms are defined in simple language; synonyms are listed; the terms are used in sample questions of the type which might appear on a job application form; and sample responses are provided for the question. Project instructional staff found the "Dictionary" of instructional value, and student response was favorable. Both project staff and clients suggested that a series of publications be developed for terms in other areas such as insurance and income tax filing.

At the close of the project, a series of instructional and information guides entitled "A guide to Independent Living for Deaf Adults," were being developed. One section of these series focused on housing -- vocabulary, types of housing available in communities, the relative merits of each type of housing, the types of questions to ask of oneself and of the landlord when house or apartment hunting, etc. The section included sample floor plans of various types of housing so that related vocabulary could be learned; copies of actual leases were included; and 35mm color slides were being produced to augment the printed materials on the subject.

An effort was undertaken to develop a "screening test" which would provide information relative to the client's ability to read public signs, tell time, count money, measure, fill in information forms, understand abbreviations, work arithmetic problems, follow directions, and other skills. A draft of the form was printed and it was being tested as the project closed.

Other efforts to develop instructional materials for use with the type clients served in this project included experimentation with materials for use with an overhead projector; compiling sets of black and white photographs for use in non-verbal communication with severely limited students; production of posters and charts; rewriting vocational training instructional materials in simple language for the deaf; and other activities. Again, an excellent opportunity to develop and test instructional materials for this group of deaf persons was lost because of personnel shortages.

During the course of the project, an outline and standard presentation orienting regular Center staff to deafness in inservice training sessions were developed utilizing transparencies for overhead projection. The presentation required approximately five one-hour sessions and was utilized frequently for both Center staff and trainees brought to the Center by the Arkansas Rehabilitation Service Research and Training Center division located there.

INSERVICE PROFESSIONAL TRAINING

During the course of the study, project staff members conducted several scheduled sign language classes for Center staff. Interestingly, these sessions were conducted not only for professional Center staff members but also for supportive staff; probably the most interested and enthusiastic groups of staff members for whom classes were conducted were those in the Housekeeping Section. Also, a few scheduled orientation-to-deafness lecture sessions were scheduled for staff members from various Center sections. In addition to these organized classes, project staff members took advantage of opportunities to informally instruct regular Center staff in manual communication and to orient them to deafness and to the importance of the project.

Project staff members also had the opportunity of lecturing on deafness and to explain the project program to every rehabilitation field counselor employed by the Arkansas Rehabilitation Service. During the tenure of the project, ARS field counselors from throughout the State were brought to the Center in groups of 8-10 for an orientation to the regular Center program. During these orientation periods for each group, a project staff member was asked to present a lecture and lead a discussion on the project program and deafness. In this way, each field counselor in the State, in addition to the special ARS counselor for the deaf and hard of hearing, was informed of the services being rendered to the deaf at the Center and was provided with some orientation to deafness.

Lectures similar to those described above were given by project staff members to several groups of student nurses brought to the Center by the Arkansas Rehabilitation Service Research and Training Center for orientation to the rehabilitation process.

In addition, several groups of trainees from the VRA supported Orientation to Deafness program at the University of Tennessee were scheduled for three-day practicums at the Center. They were lead by project personnel through an orientation to the Center operation and the project program; were exposed to direct experiences with the project clients; and participated in other activities which provided instruction and experience in rehabilitation work with deaf adults.

The project staff had formal and informal contact with numerous professional individuals and groups who visited the Center, and they took advantage of these opportunities to discuss the rehabilitation needs of the deaf and the contribution the project program was attempting to make. These included a group of rehabilitation workers from an adjoining state who spent one week at the Center to gain information for the purpose of establishing an integrated facility program for deaf rehabilitation clients upon returning home.

CHAPTER IV

EVALUATION OF THE PROJECT PROGRAM

An evaluation of the project program for deaf adults was undertaken with emphasis on its desirability, effectiveness, and feasibility. These characteristics, though separate, were interdependent to a great extent. This section will attempt to answer the questions: Was the program desirable to deaf adults who needed the service; to their parents on whom many young deaf adults were still dependent; and to the rehabilitation personnel who needed facility service resources? Did the services provided contribute significantly to the personal, social, and vocational development of the deaf clients served? Was it feasible from an administrative and operational standpoint to enroll deaf students in the Center and to expand the staffing and service patterns to meet the needs of this group of disabled individuals?

Desirability

The fact that more than 60 different rehabilitation field counselors from 10 different states utilized the program for 131 of their clients is a strong indication of the desirability of the program of integrated services for deaf adults in a large comprehensive rehabilitation center for handicapped hearing people. As many as 10 students were referred to the Center by one counselor. It is significant that the counselors who utilized the program for their deaf clients most frequently were trained and experienced workers with deaf adults. Their frequent referral of individuals to the program lends strong documentation of the desirability, if not the effectiveness, of the services rendered. Also, there is significance in the fact that student enrollment increased as the project progressed.

Additional indication of the program's desirability was observed in the willingness of so many parents to allow their dependent children to enroll at the Center, and in the parents' continued support of their children's programs once they had an opportunity to become involved in it and report back to the parents.

Information from parents revealed extensive support for the program of services offered to the deaf at the Hot Springs Rehabilitation Center. Many of them had been greatly discouraged about the lack of specialized training for their deaf offspring; for many of them, the program offered by the Center was an "answer to our prayers." The majority of the parents complimented the program and offered specific descriptions of how the services were of benefit to their children. The greatest number of favorable comments were made with regard to the vocational training their offspring received. Other areas mentioned were personal and social development; specifically, parents stated that their deaf children had developed a greater degree of independence, they had a better acceptance of their hearing loss, they seemed more mature generally, and they seemed to relate better to people socially. Medical improvement and increased communication skills were also listed by parents as areas in which the project clients made gains. One set of parents emphasized the fact that as a result of their child's participation in the program, they came to a better understanding of themselves and to improved understanding of and greater patience with their child.

Two comments expressing complete disappointment with the program were received from parents. In both instances the parents stated that their child's attendance at the Center was a waste of time -- even though the two students completed vocational training programs. Other parents, while not completely disappointed with the program, did express some specific objections: the vocational training course was not adequate or thorough enough; social conditions among the students were not acceptable to them; and, a placement service (which was not a direct service of the project program) was not provided.

The overall "success" of the program for the deaf -- "success" denoting that the experiment demonstrated that the program of integrated services to the deaf at the Center was desirable, feasible, and effective -- was supported by the comments made by members of the project National Advisory Committee in their final meeting at the Center:

> "My general impression of the Center program for the deaf is highly favorable. This is the best post-secondary program in the United States by far."
>
> "I have been visiting the Center over a four year period, and my general impression of the project for the deaf is highly favorable. This project has largely been a pioneering effort and of the three years it has been in existence it has been exploring new frontiers. I urge that this program become a permanent, ongoing program.
>
> "I am favorably impressed with the program as it has been conducted at the Hot Springs Rehabilitation Center. I strongly recommend that the kinds of services available through this demonstration be expanded to meet the needs of the hundreds of deaf people across the Nation who have similar deficiencies."
>
> "My general impression of the Hot Springs Rehabilitation Center and its program for the deaf is favorable. The project for the deaf offers a unique setting for their rehabilitation; I am very much impressed with the commitment of the project staff, Center staff, and Center administration to the program for deaf adults."

The second project-sponsored Orientation Conference for Counselors of the deaf from both public and private agencies in the states cooperating in the study was conducted January 18-20, 1967. Fourteen counselors of the deaf representing eight state rehabilitation agencies and five private agencies serving deaf persons attended. The purpose of the conference was to provide a brief review of the Center program in general, and to present the current program of services to deaf students. Participants were used as a consultive group to evaluate the program. An opportunity was provided for the participants to have contact with Center staff members as well as the enrolled deaf students. Several participants had clients in enrollment and were able to use the occasion for conferences with them. Three of the participants were deaf, themselves. A questionnaire was circulated among the participants of this conference with the following results:

> Each participant listed several positives. Generally they considered the following excellent: (1) facility and equipment; (2) reporting to field counselors; (3) apparent results achieved by clients served; (4) sincerity and dedication of staff; (5) the emphasis upon an individualized service program; (6) the high level of Center moral and social

standards; (7) the range of vocational choices; (8) the treatment of all clients as adults; and (9) integration of deaf and hearing students which provided for reciprocal learning between the two, and in a psychological boost for the deaf who were able to realize the extent of other persons' problems.

There was a concensus among participants that the Center program provided an especially fine transition for deaf students from their school milieu to the world of work and community living. The fourteen participants checked the following classifications regarding their overall impression of the Center program for the deaf: highly favorable, 9; favorable, 4; unfavorable, 1; and highly unfavorable, none. The one unfavorable classification was qualified with a statement that pointed out deficiencies in services and staff; however, the same person stated that the equipment and location of the facility were excellent, the Center staff appeared sincere and dedicated, and he would be interested in referring from 10 to 20 persons per year from his state to the program.

Since so many of the 103 clients who were discharged from Center services during the project, were limited in communication ability, their parents, field counselors, and Center counselors were asked to judge the attitudes of deaf students toward their Center experiences. The parents of 54 discharged project clients responded to this request. According to the responses of 89% of them, their deaf offspring had positive attitudes toward the Center; the remaining 11% reported negative feelings by their children. The rehabilitation field counselors of 88 project students responded to the request with the following results: 80% of the students were judged to have favorable attitudes toward the Center (41% of these were regarded as having "highly favorable" attitudes toward the Center); and 20% were judged to have unfavorable attitudes toward the Center (8% being judged to have "highly unfavorable" feelings). According to the judgement of the Center counselors after communicating directly with the clients, 76% of them expressed or demonstrated favorable feelings toward their Center experiences; 24% did not, with 7% of the latter group wishing they had not enrolled.

A total of 48 project students who had left the Center returned follow-up questionnaires revealing their feelings about the Center. The number of questionnaires returned by these students was disappointing, but when one notes that 72% of the project population were either totally or functionally illiterate, this response was gratifying.

Former students indicated a liking for the Center because the training they received helped them get a job, and they appreciated the friendships they developed during their enrollments. In spite of the fact that their language syntax was often somewhat awkward, selected statements of those former students whose comments indicated favorable feelings toward the Center are quoted below exactly as written. Those who are experienced in work with the deaf will appreciate the statements much more than those who are not. For the uninitiated, these excerpts of statements will reveal typical language deficiencies of the clientele served:

--because of the deaf friends I had
--I like HSRC because I had learned many things
--I met a lot of people that were deaf. After learning sign language I was able to communicate with them. This had made my life very happy. I am going to marry a deaf boy I met at HSRC. (This statement is from an adventitiously deaf young woman who had reached utter despair prior to her enrollment at the Center).

--because there is important to learn for future job
--I think it was wonderful. I had a good time oil painting and friends were nice
--I like friends
--it was like college and girls to talk to (a female student)
--I always had someone to talk to, always had something to do when lonesome, easy to make friends
--it helped in many ways
--I like to meet new people and make friends
--because I had a chance to meet a lot of new friends and to learn a trade
--I was learning good
--we learn a lot about trading and communicate with the deaf from out of state
--because it was able to offer me the course I was most interested in
--I wish I stay there more months or years but I completed my training. Someday I probably go back to there to again to take another training in many years. I really miss everyone even staff. I had been enjoyed with everyone while I was there
--because HSRC is a good school to learn different trades and understand about getting a better job
--because I learned a trade and I enjoyed the recreation facilities while learning
--because I was treated very kind
--I had learned lots about job, taxes, insurance, etc.

In some of the statements above, it was evident that the students had some assistance with the language they used to express themselves, but the statements are believed to sincerely reflect the feelings of these former students toward the programs in which they spent several months of their lives. Not all of their comments were complimentary. The following express the feelings of those who did not like the Center or who were at least disappointed with their enrollment experience:

--not enough training
--didn't like it at first
--I still not find job for what I was training for
--I have not find a job which I have been training in HSRC
--too far from home
--did not like other handicapped people at the Center

There were undoubtedly more students who could have expressed criticism had they been assisted with the questionnaire or had they possessed language capability to respond. Some of the students stated or indicated before leaving the Center that they did not get enough counseling attention; others felt that the level and quality of training were disappointing, and that most of the hearing staff members could not communicate well with them. Several of the students stated that they wanted more deaf staff members, especially a deaf counselor.

According to the majority of questionnaires returned by the counselors of clients who had terminated Center programs, the services were of benefit to them in their casework. The counselors had particular praise for the evaluation services. They stated that this service was of significant benefit to them in understanding their clients and in planning service programs with them. Sample statements of counselors regarding Center evaluation services were: "helped me to fully evaluate his work potentials"; "confirmed our opinion"; "was excellent and critically important"; and "we are now aware of the scope of this client's personal problems".

Samples of the statements field counselors forwarded regarding the feelings of their clients about the project program of services follow:

- --He loved the Center and felt badly that his medical condition necessitated his discharge.
- --He spoke highly of the Center.
- --He was favorably impressed with the counselor who worked with him.
- --He has encouraged some of his friends to go.
- --He is very proud to be a graduate.
- --She was very happy to have found social acceptance which had not been found previously.
- --She continues to tell her friends about your wonderful Center.
- --She was grateful for the training she received.
- --He had a grand time and got what he went after; now he is successfully employed.

Statements revealing negative attitudes of clients toward the Center included the following:

- --He feels his training time at the Center was wasted; he complains of the low morals of students.
- --She resented the close supervision -- especially in the dormitory areas.
- --He was disappointed in not receiving much more attention to the problems confronting him; he felt that there should be more qualified workers with the deaf.
- --He felt he was not understood.
- --She felt that the Center was too strict.

Students' interest in their Center service programs and their overall adjustment to the Center milieu provided some indication of the desirability of the project program of services to deaf persons. At the termination of each student's Center program the Center counselor, in consultation with other members of the project staff, rated each student in these two matters. Table XII presents this information in tabular form. In summary the behavior and statements of 72.8% of the project clients indicated favorable interest in their Center programs and for 27.2%, lack of interest.

TABLE XII -- STUDENT INTEREST AS JUDGED BY CENTER STAFF (N=103)

Rating	Number	Percent
Excellent	19	18
Good	25	24
Fair	31	30
Poor	18	17
Entirely Unsatisfactory	10	10

The Center counselor's ratings of the project students' overall adjustment to the Center milieu are presented in Table XIII. Sixty-five percent were rated fair to excellent in overall adjustment to the Center milieu; the adjustment of 34.9% was rated poor or entirely unsatisfactory.

TABLE XIII -- STUDENT ADJUSTMENT AS JUDGED BY PROJECT STAFF (N=103)

Rating	Number	Percent
Excellent	19	18
Good	28	27
Fair	20	19
Poor	23	22
Entirely Unsatisfactory	13	13

In summary, the project program of services for the deaf at the Center was desirable to a degree. While the large majority of those who had contact with the program (clients, their parents, the referring field counselors, project staff, National Project Advisory Committee, special professionals from the area of deafness who evaluated the program, and deaf and hearing lay visitors) attested to its desirability, there were a number of obvious negatives which detracted from this desirability:

1. Specialized staff to serve the deaf were too few; also needed professional areas such as psychology, placement, and social work were absent from the project staffing roster.
2. Many of the regular Center staff members, if not the majority, developed neither proficiency in manual communication nor "in depth" understanding of deafness and its implications for the clientele served in the project.
3. Specialized staffing was minimal for the intensive counseling and personal and work adjustment training needed by the type clientele served in the project.
4. Specialized staffing was inadequate for providing the amounts of basic education instruction needed by all of the project clients.
5. The large majority of students were shortchanged in their vocational training programs; they received too little assistance in learning the names of the tools, materials, and equipment of their trades and in acquiring verbal understanding of the processes and jargon of their vocations; in addition, Center training policy was generally to train students to job entrance levels rather than to craftsman skill levels; also, the size of the student enrollment in nearly all of the vocational training areas precluded adequate provision of individual attention to deaf students.
6. Too little assistance was provided to the students in their social adjustment to the Center milieu -- dormitory and recreational personnel possessing high levels of communication skill with and understanding of the deaf and their needs were unavailable.
7. The program was restricted too much to the facility itself; this approach hindered rather than enhanced the personal and social adjustment aspects of the rehabilitation process with many of the clients.

Effectiveness

The effectiveness of Center services for the deaf was judged by the Center staff, the field counselors for the deaf, the parents of the persons served, the clients themselves, and case records. The questions pertinent to judging program effectiveness were: Did the client benefit from Center enrollment; that is, did he experience significant gains in personal and social development?; Did he obtain or substantially increase existing vocational skills?; and, Was he more ready for independent living?

Of 103 students who terminated Center programs during the project, 57 completed vocational skill training and received certificates and 46 terminated without receiving certificates. The ensuing information reveals to some extent the degree of effectiveness of Center services to these 103 students.

Among the 57 students who completed prescribed vocational skill training programs during the three year study:

- --All were awarded vocational training certificates in regular Center graduation exercises.
- --25 had never previously received a vocational or academic diploma or certificate of any kind.
- --14 of 21 who had no pre-Center work experience whatever, were known to be employed at the time follow-up information was secured.
- --5 of 36 who had pre-Center work experiences were known to have at least doubled their previous salaries in post-Center employment positions (Disappointingly, in spite of the intensive and extended efforts to obtain thorough follow-up information, data on post-Center employment status and salary was not complete).
- --11 were among the 40 students classified as multiply handicapped.
- --33 were judged by their referring field counselors to have made significant personal and/or social gains in addition to the improved vocational skills.
- --13 were regarded by their Center counselors to have made gains in personal and/or social areas equal to or surpassing gains made in vocational skills.
- --Parents of 43 of these students returned follow-up questionnaires; 39 stated satisfaction that their deaf offspring made gains as a result of their Center experience while 4 parents felt their children made no gains in spite of the fact that they completed vocational training. Parents of 15 students were satisfied that their children made personal and/or social improvement as well as gaining increased vocational skill.
- --Field counselors for 51 of these students returned follow-up questionnaires; only one of these counselors felt that his client made no improvements as a result of Center services in spite of the client receiving a vocational training certificate indicating successful completion of a prescribed training program.

While all 57 of these students were judged by Center staff as making gains in vocational skills and knowledge, recognition was given to the obvious fact that some made more gains than others. At the time of their Center graduation, 13 of these students were predicted by Center staff to be poor or only fair workers in the competitive labor market; while these students made gains in vocational skill, employment for them may be successful only in sheltered or sympathethic settings.

For the purpose of noting some interesting comparisons, the group of 46 students who terminated Center programs without completing vocational skill training are divided into two groups. Group I represents 34 students who were classified by their Center counselors as making no visible or measurable improvements or gains during their Center enrollment; Group II represents 12 students who were judged by their Center counselors as having made visible gains even though they did not complete vocational skill training programs.

Group I: Of this group of 34 students who did not complete training and who were judged by project staff as making no significant gains during their Center enrollment, 20 were classified by project staff as multiply handicapped (see page 14).

The information below applies to the 34 students.

Discharge status:

- --5 volitionally terminated their evaluation services
- --8 volitionally dropped from vocation skill training programs
- --3 were discharged by caseworker or administrative decision due to behavior which was unacceptable in the Center setting
- --10 were discharged by caseworker decision due to medical, mental, or physical difficulties which could not be met within the scope of Center service and staffing patterns
- --8 were discharged with the classification "Completed Evaluation" with no further Center services provided

Length of Enrollment:

- --The range of enrollment periods for these 34 students was from 3 to 270 days
- --5 remained less than two weeks
- --3 remained from two weeks to 30 days
- --12 remained from 31 to 60 days
- --7 remained from 61 to 100 days
- --7 remained more than 100 days

Helpfulness of Center services to clients as judged by their field counselors:

- --12 Yes, Center services were of help to the client; (this statement conflicts with the judgement of the Center counselors that none of these 34 students were helped by the Center program).
- --13 No, the client did not benefit from Center services.
- --9 No response from the field counselor was available or he responded "not sure".

Helpfulness of the Center services to the field counselor himself as judged by the field counselor:

- --17 Yes, Center services were helpful in making casework decisions
- --10 No, Center services were not helpful to the field counselor
- --7 Counselor response was not available or his response was "not sure"

Judgement of parents regarding whether Center services were helpful to their deaf and hard of hearing offspring:

- --8 Yes, services were helpful
- --6 No, Center services were not helpful
- --22 Parents did not respond to the request for this information

Significantly, a total of 16 of these 34 students for whom Center staff felt no gains had been made as a result of Center services, were judged by either or both their field counselors and parents to have benefitted from their Center experience.

Group II: The information below concerns the 12 students who were judged by their Center counselors as having made visible gains during their Center enrollment in spite of the fact that they did not complete vocational skill training programs. Six of these 12 students were regarded by project staff as multiply handicapped.

Discharge status:

- --1 dropped out volitionally from evaluation services
- --4 dropped out volitionally from a vocational skill training program
- --3 were discharged by either administrative or casework decision due to behavior which was not accepted in the Center setting

--3 were discharged who had either medical or mental disabilities for which available staff and services were inadequate or ineffective
--1 "completed evaluation" with no further Center services recommended or desired

Length of enrollment:
--The range of enrollment for these 12 students was from 27 to 316 days
--2 remained 30 days or less
--2 remained from 31 to 100 days
--3 remained from 101 to 200 days
--3 remained from 201 to 300 days
--1 was enrolled more than 300 days
--1 was discharged by administrative decision, re-enrolled 18 months later, and was enrolled at the time the project terminated

Helpfulness of Center services to clients as judged by their field counselors:
--7 Yes, Center services were of help to the client
--1 No, the client did not benefit from Center services
--4 Response from the field counselor was either not available or his response was "not sure"

Helpfulness of the Center services to the field counselor himself as judged by the field counselor:
--8 Yes, Center services were helpful in making casework decisions
--1 No, Center services were not helpful to the field counselor
--3 Counselor response was not available or "not sure"

Judgement of parents regarding whether Center services were helpful to their offspring:
--3 Yes
--3 No
--6 parents did not respond to the request for this information.

A total of 8 of the 12 students were judged by either or both their field counselors and parents to have benefitted from their Center experience, thus confirming the judgement of the Center counselors that these students gained from Center services in spite of leaving without completing vocational training programs.

The rehabilitation field counselors of 89 of the 103 students who were discharged from Center programs during the tenure of the project were asked whether, in their judgements, Center services were helpful to their clients and if so, in what ways. Their responses were "yes" for 80% (71) of their clients, "no" for 13% (12), and "not sure" or no response for 7% (6). Selected excerpts representing statements of field counselors describing ways in which Center services were helpful to the clients follow:
--He obviously gained in self-confidence as well as in special competence in printing.
--She learned to socialize; and, since being from an over-protected and sheltered environment, she had an opportunity to mature.
--She had some problems in both personal and working relationships with which she received valuable help at the Center; she also received sufficient training to enable her to secure employment.
--He came to be more realistic in his vocational objectives.
--He became a more stable, mature person; he learned more about himself

and how to relate to others.

- --He gained some communication skills as well as vocational skills; it was easy for me to place this client in a job after Center training.
- --Center services gave the client and his parents an opportunity to explore and accept his disabilities.
- --She learned to accept responsibility.
- --He could never have worked without Center services.
- --Center services gave the client insight into the realm of work; he also learned to get along with people; he learned to carry out work duties in an above average manner.
- --She found her a husband at the Center.
- --Group counseling, work adjustment, and work orientation seems to have been beneficial; he gained in ability to form meaningful relationships with others.
- --This young man was illiterate and unskilled; he made tremendous gains in communication ability, vocational skill, and in the ability to live independently.
- --This young lady has finally found complete happiness. The change in her attitude is remarkable; without a doubt, the rehabilitation of this client would have been impossible without the services she received at Hot Springs Rehabilitation Center.
- --He received encouragement not only in his occupation training, but also in his hobby work.

Most of the 12 students who were judged by their field counselors not to have benefitted from Center services had serious character and behavior disorders; they did not adjust to the routines of Center service schedules, and services and staffing were inadequate to meet their needs. Field counselors realized that they were referring difficult cases and expected little, if any benefit from the Center services. For these persons, the Center was used as a "last resort" before either formally or informally classifying the client "non-feasible" for rehabilitation services. Center project staff always cautioned against permanently excluding these persons from services since the future might bring new programs and methodologies for their successful rehabilitation, or other service facilities or personnel might be able to provide effective services. Only one field counselor openly revealed criticism of Center and project personnel for not effectively serving his client (later diagnosed as psychotic): "No constructive services were provided; we are at the point where we began one and one-half years ago."

Former students were asked to make any suggestions they believed would improve the program of services for deaf students. The following comments were stated on follow-up questionnaires and might imply some criticisms of the services received:

- --Teaching them to read and write.
- --I think you need more deaf or hearing teachers to teach the deaf how to talk. (Orally).
- --I would like to have an art department and a library. (Art was offered as a recreational activity only; a library for students was established after this student left the Center).
- --Need more vocabulary work.
- --More organized social activity.
- --More help with social things.
- --Deaf people needs more time to develop skills ability. Instructors should sign the meaning instead of writing.

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- --Supervisor should help and explain more to students.
- --Teach more about budget, apt., buy a car, insurance, must watch out of budget before buy something.

To summarize, about 85% of the project students made worthwhile personal, social, vocational, and in a few instances medical gains while enrolled at the Center. However, it is not believed that most of the clients benefited to the extent of their capabilities. In other words, the services to clients were effective to a degree.

Project personnel highly commended all regular Center personnel for their efforts on behalf of deaf students; and they judged the service offerings and various operational aspects of the overall Center program as conducive to meeting the needs of the deaf clients served in the project. Professional workers with the deaf who served as consultants to the project confirmed these feelings. However, both project personnel and consultants were greatly disappointed that deaf students were dischared with such wide gaps between the gains they made and their capacities to have gained much more.

The lack of greater effectiveness from the service program is directly related to the items discussed at the end of the immediately preceding section of this report under the topic heading of Desirability. Services were planned and conducted without the benefit of a differential diagnosis; many, if not most students left Center vocational training programs without knowing the names of tools, materials, and equipment of their trade and without a verbal understanding of the processes and jargon of the trade; most students were terminated from vocational training programs with only job-entry rather than craftsman skills; vocational instruction materials were not adequately adapted to the language and communication needs of the deaf students; most of the students terminated Center services unprepared through structured training and experiences for independent community living -- the majority had experienced only institution living in the home, a residential school for the deaf, and rehabilitation center; most of the students left the Center with just about the same academic deficiencies with which they enrolled -- in basic language, arithmetic, and measurements.

Project personnel concluded that the services were most effective with deaf clients who were relatively well adjusted, possessed abilities to handle the English language at the sixth grade level and above, and whose motivation to do well in their rehabilitation programs was readily apparent. The Center and project staffing and service patterns for serving the low achievers, the poorly adjusted, and those with serious multiple physical handicaps were severely inadequate.

Feasibility

The major consideration in judging the feasibility of serving deaf persons in the Center was whether the project program would seriously interfere with or disrupt services to regular Center students. Would the enrollment of a number of deaf students, in addition to specialized personnel to serve them, and the provision of regular and specialized services cause significant administrative problems, impede the progress of regular clients in their service programs, result in widespread frustration or criticism from regular Center staff members, or produce numerous interpersonal conflicts between hearing and deaf students?

While receiving and serving deaf students required adjustments in routine procedures, the addition of specialized service staff, and expansion of service offerings, the intake, evaluation, training, counseling, and provision of other services to deaf students as accomplished during the project period, was taken in stride by Center administrators, service staff, and regular Center clients. The program for the deaf, in fact, contributed positively to the general atmosphere of the Center.

Most of the normally hearing students were intrigued with the opportunity to learn finger spelling and sign language; most of the Center instructional and other service staff looked forward to serving deaf persons as a stimulating challenge. The right of deaf persons to be served in the Center alongside other rehabilitation clients was never questioned, challenged or debated by either students or staff. The deaf clients and the specialized staffing and services for them became an integral part of the Center operation.

Prior to the introduction of relatively large groups of deaf persons into the Center, there were staff feelings of inadequacy to communicate with and meet the needs of deaf students to whom they were to provide services. These apprehensions were partly overcome with the conduct of formal and informal sign language classes and orientation to deafness sessions. The availability of project staff members to assist regular staff members with deaf students also helped to dispel their feelings of inadequacy.

At first, the introduction of deaf persons into the Center was a novelty for both hearing students and the regular Center staff. Some instructors actually seemed to become so engrossed in serving their deaf students that they overlooked the needs of their hearing students. The hearing students requested alphabet cards, sign language classes, and sign language books. For most staff and students this novelty wore off and the deaf were accepted and served without fanfare just as were all other Center students.

The conduct of this research and demonstration project met with acceptance from Center administrators, supervisors, staff, and students. It was conducted to its planned conclusion with greater involvement of ARS monies, Center staff, project staff, and modifications of Center policy and procedures than were anticipated when the study was proposed. On this basis, the conclusion is made that the provision of services to deaf clientele during the course of this study was feasible. However, there is some question regarding the general feasibility of providing services to relatively large numbers of deaf persons (10 to 12% of the total student enrollment) in the Center on a continuing, permanent basis.

Since there was no project provision for phasing out Federal funds, an adequate assessment could not be made regarding several aspects of operating a regional Center program for the deaf on a permanent, continuing basis. Federal grant funds supported the project staff in toto and also a substantial portion of the clients' Center service costs; ARS expended a large amount of State monies to pay Center service costs for out-of-state clients to assure adequate referrals to the Center. Center service charges for deaf clients were the same as for regular Center students in spite of the addition of staffing, equipment and service programs especially for the deaf. Two vital questions which cannot be answered are:

> Without the involvement of Federal funds, could the Arkansas Rehabilitation Service and the Hot Springs Rehabilitation Center administrations continue to serve large numbers of deaf persons at the Hot Springs Center?
>
> Without Federal or ARS assistance with case service costs, would referring agencies from a multi-state area continue to send large numbers of clients to the Center for services?

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Related questions are:

When the Center is operating at near capacity, could it continue to enroll numerous deaf clients from states other than Arkansas since priority is given to Arkansas students?

Could ARS assimilate the salaries of the specialized staff necessary for the deaf?

Would it be necessary to raise tuition charges for deaf students, and if so, would state rehabilitation agency personnel from the Region be as likely to utilize the program?

It does not appear likely that ARS could continue to pay for Center services provided to out-of-state deaf clients, and it does not seem likely that specialized staff could be maintained, let alone expanded, without increasing tuition charges for deaf clients served at the Center.

In addition to the financial matters, there is the question of whether large numbers of deaf clients from states other than Arkansas could be served even if finances were not a question. The Center was established as a state facility for handicapped persons from the State of Arkansas. While normally hearing students from states other than Arkansas have always been accepted for services, the number of these persons has decreased as Center space was needed for rehabilitation clients from Arkansas. As the number of referrals from Arkansas increase and the Center student population reaches capacity, there could very well be a demand to more or less exclude all out-of-state clients, including deaf persons. While the Agency administration at the time was highly favorable to continuing services for the deaf at the Center, no assurance was given that the Center could commit itself to serving numbers of out-of-state deaf persons on an indefinite basis. There was no question about the permanent availability of Center services to Arkansas deaf persons needing its services; however, the Arkansas population of deaf persons is relatively small, and there is a question of whether ARS could maintain the levels of specialized staff needed to serve the small numbers of Arkansas deaf persons who might be enrolled in the Center at any given time.

In summary, the conduct of services for the deaf at the Center was judged feasible for the tenure of the project; but important questions have been raised relating to the feasibility of continuing the services on a self-sustaining, permanent basis.

The Communication Problem

Directly related to the desirability, effectiveness and feasibility of services to deaf rehabilitation clients at the Center was the "communication problem." This "problem" permeated the entire program of services to the deaf and was generally misunderstood by non-specialized staff.

The communication difficulties between the non-specialized staff and most of the deaf clients served was not overcome by teaching the staff member finger spelling and sign language. To the disappointment and frustration of several staff members who "picked up" manual communication readily, they were still unable to communicate satisfactorily with many Center deaf students. At this point, it was clear that the barrier to communication with these deaf persons was the staff members' lack of knowledge and understanding relative to the implications arising from the disability of early profound hearing loss itself -- knowledge which can come only through intensive instruction, study, and supervised experience.

Many experienced professionals have stated that with the exception of educating those who are both deaf and blind, educating profoundly deaf individuals is the most difficult of all educational tasks. Many of the deaf rehabilitation clients referred to the Center did not respond well to school programs which were staffed and designed especially for them. Their understanding of the English language, even though a "native", was extremely impoverished; their understanding of the general American society was limited; even the few Center students who had progressed to more adequate academic and language levels in school, were grossly limited in their general fund of knowledge of the world about them. The implications of the developmental lags of project clientele have far reaching effects on their communication with normally hearing persons and on their ability to respond to the usual instruction methodologies of which non-specialized staff are familiar.

The "communication problems" during the course of this study were serious. To a large degree, they were never overcome. The nature of the difficulties are exemplified by the following:

1. Even after months of experience with deaf students and project staff members, Center instructors would hand a book or a set of written instructions to a deaf student and expect him to read and understand them.
2. Staff members were continually surprised that with only a handful of exceptions, the deaf students could not "read lips" and that the speech of most of them was largely unintelligible.
3. An instructor who had "graduated" from a staff sign language class signed what he thought was "stop" to a deaf student as he left the training area; however, the sign was not made clearly and the student decided the instructor meant to "end" or "finish" the job on which he was working; when the instructor returned, he was upset that the student had not followed directions until he realized the communication error was his; incidentally, the job was done improperly and had to be redone.
4. Many students who were reported by staff members for willfully violating regulations were judged by project staff members as innocent due to inadequate communication to them of the rule or policy.
5. On occasion, vocational instructors would exhaust every means they knew to explain a process or technique to a student; and then, having failed to impart the concept, call in a project staff member to interpret or to explain the procedure in a manner which could be comprehended by the student.
6. Non-specialized staff would frequently judge a student to have understood a communication because of his tendency to "smile and nod affirmatively," only to learn later that he had not understood.
7. The deaf reader will well understand that deaf members of the project staff were often excluded from routine communications from other staff because of communication apprehensions or inconveniences to hearing staff members.
8. Most Center staff members were unable to communicate with the deaf well enough to engage in lengthy "bull sessions" or extended periods of informal chit-chat. As a result, informal encounters between staff persons and the deaf were limited primarily to non-verbal expressions of friendliness. Therefore, many informal learning opportunities for the deaf were bypassed.

As a result of the communication problem, the limited number of project staff members found themselves pulled in numerous directions throughout the course of the project. The project counselor, for instance, was called upon constantly for interpreting services in all departments of the Center; he became a vocational tutor; he spent much time in the orientation of students to Center life; he was called into the dormitory areas occasionally to assist a student with a problem; and he was expected at all times to relate the project program to the overall Center operation. No project staff member was able to provide only the service for which he was hired; each had to "double-up" and "triple-up" because of the difficulties regular staff members experienced in "communicating" with the deaf students they attempted to serve.

Not to be overlooked are the disappointment and frustration of deaf students. One might better understand their feelings if he imagined himself suddenly placed as a client in a rehabilitation center in a foriegn culture where neither he nor the staff spoke one another's language. However, in this illustration, one would not expect to understand or to be understood readily or to make normal progress in his training program -- deaf clients referred to the project program at the Hot Springs Rehabilitation Center had a right to expect both.

Criticism of non-specialized staff is not intended, nor would it be justified. Most of them were intrigued by the challenge the deaf students presented; they wanted to be effective in the services they provided; they made sincere attempts; their interest, sincerity, and efforts are highly commended. Efforts to alleviate the communication problem, as herein described, through inservice training for staff, were insufficient.

CHAPTER V

DISCUSSION, CONCLUSIONS AND MAJOR RECOMMENDATIONS

In addition to the foregoing, certain other aspects of the study further clarify and evaluate the project program and bear directly upon the conclusions and recommendations to follow.

Background

The explicit purpose of this study was to determine whether one specific ongoing comprehensive rehabilitation center could serve deaf rehabilitation clients effectively and feasibly and whether these results might generalize to other facilities. Implied in the purpose of this study was the question of whether existing rehabilitation facilities could meet the needs of deaf adults or whether there was a need to establish separate facilities for them. If existing facilities could meet the needs, then huge outlays of monies would be unnecessary for the provision of separate facilities and services.

Recruitment of Clientele

One of the anticipated results of this project was that hundreds more deaf persons would be referred to the Center for services than could be accepted. This would have had far reaching implications. Special surveys and the judgement of experienced educators and rehabilitation workers with the deaf provided documentation of the need of hundreds, if not thousands, of deaf persons in the project states area for the services offered. Such large numbers of referrals to the project program did not occur. Obviously something was amiss.

The discrepancy between the apparent need and the lack of demand for the services offered in the project program was attributed to inadequate recruitment efforts of project personnel and to Center and project admission policy.

At the outset of the project, information regarding the project program was made available only to two referral sources -- schools for the deaf and state rehabilitation agencies. The extensive efforts to orient referral personnel to the Center and the project for the deaf, including project-sponsored conferences at the Center, failed to result in a sufficient number of referrals to justify the continuance of the project. Only when (1) the insufficiency of numbers was called to the attention of referral personnel, stating the possibility of terminating the project prematurely, (2) mailings of program literature directly to parents of potential young deaf adults were undertaken, and (3) seeking the involvement of deaf persons as a referral source and as project staff, did enrollment begin to rise significantly.

A significant factor which probably accounted a great deal for the lack of applications for admission to the Center program was the instruction and information given to counselors at the beginning of the project. They were told that the maximum number of project clients to be enrolled at any one time would be 45 and that there would be a quota of four students from each state at any one time so that each state would have equal opportunity for the admission of their clients to the project program. It is understandable that state rehabilitation agency field personnel would be reluctant to expend great amounts of time and effort to locate and process hundreds of deaf clients for admission to the Center only to have them placed on a waiting list or not served at all.

Even when information regarding the project program was mailed directly to the recent graduates of schools for the deaf and their parents, they were asked to contact their local state rehabilitation counselor or their special counselor for the deaf. Project staff and consultants now believe that numerous inquiries for admission would have resulted if extensive efforts had been undertaken to publicize the program on a much broader basis and if interested persons would have been instructed to contact the Center directly for further information. The Center project personnel could then have had a more direct basis on which to judge demand for the program; they could have referred inquiries to field personnel for follow-up.

The Project Clientele

Many of the clients (31% of the total served) referred to the project were "hardcore" cases -- deaf persons with serious character and behavior disorders, multiple physical disabilities, severe retardation, and diagnosed mental disorders. They had been ineffectively served in or turned away from all other available rehabilitation service resources. Their referral to the Hot Springs Rehabilitation Center seemed to be a "last ditch" effort to help them or to permanently classify them as "non-feasible."

These deaf individuals presented special challenges to the Center and project staffs, many of which could not be met. The experience of attempting, but failing, to meet their needs effectively resulted in the designing of a proposal for a research and demonstration project to determine the capability of the Center to serve these persons with the addition of more specialized staff and services. This proposal was approved by the Arkansas Rehabilitation Service, submitted to the Rehabilitation Services Administration, and funded. That project commenced on June 1, 1968, and is in progress at the the present time. (RSA Project No. RD-2684-S.)

Admissions and Discharges

The admission of clients on a regional basis was handled with relative ease. There were problems and inconveniences for Center, project, and field personnel; however, these difficulties probably were no greater than those encountered by Center and field personnel involved with regular Center clients from states other than Arkansas.

Some of the field personnel complained about all the "extra" forms and casework involved in getting a deaf student to the Center; on the other hand, the Center Admissions Committee and project personnel often complained that case information was scanty. Field personnel whose primary assignment was to work with deaf and hard of hearing clients were usually more thorough in their casework with the client previous to his Center enrollment and afterward. Non-specialized counselors could not be depended upon as readily to submit complete and accurate information when requesting admission of deaf persons to the Center; they did not understand their client as well and they seemed to have less contact with schools for the deaf from which valuable information regarding the client could be obtained.

The greatest complaint of field personnel seemed to be that after a great deal of casework, involving form completion, plan writing, and interviews with the client and family to "sell" them on the suitability of the Center program, admission of the client would be denied or deferred. To avoid unnecessary efforts, many of the field counselors began calling the Center or sending letters of inquiry to discuss a particular deaf client they felt might benefit from the service program. The amount of formal casework required of field personnel prerequisite to requesting admission of clients to the Center, probably curtailed the number of referrals to some extent.

The "success rate" of the project clients would have been much higher had the Admissions Committee and project coordinator rejected persons for services whose potentials for completion of Center vocational training services appeared quite low. Since the Center program of services was being offered as a demonstration, however, these persons were accepted on a trial basis. This approach provided valuable information regarding the type client whose needs could not currently be met within the Center, the type programs they needed, and the kind of professional and supportive personnel required to serve them.

Center and project staffs did not always regard volitional withdrawal and administrative or caseworkers' discharges as negatives. In most instances, project staff members were disappointed when students voluntarily withdrew from their Center programs; and these persons were encouraged to remain if the Center program was judged to be helpful or potentially helpful to them. However, some students simply did not want to remain at the Center and pressuring them to stay could have been damaging to them. The doors were always open for readmission, however, even for those who were discharged by caseworkers' or administrative decisions.

Pre-Vocational Adjustment Training

The Pre-vocational Adjustment Training Unit of the Evaluation Section was initiated just prior to the project period. Lack of funding grossly retarded its development, however. The number of sub-contract jobs were few; work activities were limited; space was inadequate; and staffing was limited. No formal and scientifically designed behavioral modification programs were underway. For these reasons, among others, Center vocational training areas were usually utilized for work and personal adjustment training resources. This was neither fair to the instructors nor entirely suitable for the clients. However, many of the clients' personal, social, and vocational needs were at least partially met in this way.

Evaluation

The vocational evaluation of project clients was undertaken with emphasis on their potentials and interests for enrollment in one of the existing Center vocational training courses. Project personnel and consultants expressed disappointment in this approach because it sometimes denied students entry into the vocation of their first choice, and it limited their vocational horizons. However, field caseworkers and the deaf clients themselves were faced with an enigma -- there were few places at the time where deaf persons could receive post-school vocational training in settings where they would receive supportive assistance from specialized persons in the area of deafness; therefore, the choice was either to accept one of the Center vocational training areas or to seek some unskilled or semi-skilled job resulting in underemployment. It was disappointing that deaf clients could not be offered a wider selection of vocational areas during their evaluation period, either in the Center or in other existing training facilities. This problem has been alleviated somewhat by regional vocational training programs for the deaf which developed subsequent to the conclusion of this study.

The flexibility of and the resources for the Center evaluation services were ideal for serving deaf persons, with the exception that staffing was not available for differential diagnoses. An area of evaluation services which was completely lacking during the project period was diagnosis of learning problems. Several of the students appeared to have the intellectual ability to learn, and they seemed to apply themselves diligently to learning tasks, yet their abilities to grasp concepts or to retain information were limited. Learning problems were not traced to their sources, and instructional methods to circumvent the learning handicaps were not scientifically applied.

Especially helpful as vocational evaluation techniques were job (or work) sample testing and tryouts in the Center vocational training areas. These were well suited to the low achieving deaf students whose communication ability via any means was severely limited. Their reactions to sample work tasks, from self-selected work areas, and their performances in the actual vocational training programs, on a tryout basis, provided non-verbal indication of the students' abilities, interests and aptitudes for specific vocations.

Several students were not ready for formal vocational evaluation services. Their lack of knowledge about the "world of work" and their need for personal, social and work adjustment training precluded efforts to evaluate and counsel them for selection of a vocation. They were in need of orientation to employment, job exploration, and adjustment training services as a prerequisite to selection of formal job training courses. These needs largely went unmet because of no existing formal program and because specialized staff were overloaded with other tasks. Part time and summer work experience for these students would have done much to fulfill these needs.

Evaluation was a continuing process at the Center. Even though students completed formal evaluation in the Evaluation Unit, their personal, social and vocational needs remained under constant scrutiny to determine whether additional services were needed and could be provided at the Center concurrent with vocational training programs.

Project personnel developed a "Goal-Oriented Evaluation Outline" which was applied in their work during the latter stages of the project. Of course, various information and observation forms were used during the evaluation service throughout the project.

Vocational Training

Center vocational training courses were generally planned to raise the trainees only to the entry level in a trade or technical field; training to top levels was the exception rather than the rule. This approach, while permitting the Center to serve greater numbers of persons, was disappointing with regard to training the deaf. According to the Southwest and New England surveys, their handicaps often limit upward mobility in the actual employment setting; therefore, project staff felt that the deaf needed to be trained to the highest levels possible during their formal training periods.

The Center vocational training instructors superbly served project clients in spite of numerous obstacles: (1) little formal orientation to the possible implications of deafness; (2) insufficient training in manual communications; (3) oversized student loads; (4) minimal assistance from project staff members: (5) lack of sufficient quantity and quality of specialized materials and media for adapting instruction for deaf students; and (6) the enrollment of many students who needed personal, social, and work adjustment training and educational enrichment prior to enrollment in vocational training courses but whose needs the project and Center staffs attempted to meet in and concurrent to vocational training. In spite of this, several project clients achieved vocational skills beyond what was expected of them. The instructors for a few deaf students acclaimed them as the best students they ever had -- hearing or deaf.

In spite of accolades regarding the vocational training program from parents, rehabilitation field counselors, the project clients, the Center staff and others, it was evident that most project students were shortchanged in the vocational training they received. The majority were seldom, if ever, expected to reach the same levels of knowledge in their vocational areas that hearing students of equal mental abilities had when they completed the same courses.

Communication

The majority of clients served in this project had serious communication deficiencies. Rehabilitation personnel serving them did not always seem to recognize the moral and ethical responsibility to ensure communication between the client and themselves. Their obligation in the matter is stronger than that of the deaf clients they serve. If non-specialized professionals cannot communicate with the deaf clients, then they should obtain the services of someone who can.

The communication gaps which existed between hearing and deaf persons during the project have implications for both the provision of services to deaf persons in ongoing centers and the need for specialized facilities for the deaf.

The Center as the Focal Point of Services

Experience in this project has shown that the facility should be regarded only as the base of operations and not as the location of all services. Extensive outreach to the community for housing, recreation, and social and work experiences is needed for deaf clients. They will not learn in the classroom or counseling office how to live independently -- they must experience it; and professional assistance must be available to structure these experiences for maximum learning benefits.

Administrative Considerations

Experience during the project indicated that each staff member who is specialized in working with the deaf should be assigned to the Center section in which his primary service is performed at HSRC: Evaluation, Vocational Training (special education, vocational tutoring), or Student Services (counseling) -- and that he should become an integral member of that Section, identifying with regular staff members in the Section, being supervised by the Section head, and taking his turn at general duties which are shared by personnel in that Section. This arrangement identifies staff roles more clearly and minimizes misunderstandings.

There was some question regarding whether a full time "coordinator of services to the deaf" would be needed if a special research and demonstration project were not being conducted. The answer to this depends upon various circumstances including the capabilities of the person who serves as counselor for the deaf, the size of the counselor's student caseload, the total number of specialized staff members for the deaf, the attitudes of Sectional supervisors regarding services for the deaf, the amount of in-service training in the area of deafness to be provided to regular staff members, the number of deaf clients enrolled for services, the amount and type of work expected of the counselor, the number of counselors employed for the deaf, and many others. In instances where 40 to 50 deaf persons and six to eight special staff members are employed to work solely with the deaf, there probably is need for a full time coordinator of the program for the deaf. His roles and functions will necessarily vary with circumstances; but he should, of course, be highly trained and experienced in the area of deafness. He might very well be deaf himself.

Professionally qualified deaf persons should be among the specialized staff members who serve deaf clients. Their presence will enrich the service program, assist in gaining wider support for the services, reduce communication problems between staff and students, and in several other ways contribute to an improved program for the deaf. Administrators should note that communication with deaf staff members may provide some inconveniences, but the benefits of having a capable deaf person on the staff will more than offset such problems through improved services for the deaf.

The Concept of Minimalism

One of the questions raised for this study was: Could deaf persons benefit from the existing program with a "minimum" of special staffing and service considerations? The answer lay in one's degree of commitment to the deaf persons who needed the project services. The question, in reality, asks: Can deaf persons be effectively served in the Center with few special services and staff and with little additional financial investment?

When the project terminated, it had been functioning for several months with a full complement of full time project staff members who had special training and experience in working with the deaf: coordinator, counselor, counselor aide, evaluator, special education instructor, and secretary (the project director served the project in addition to his regular duties as a Center Section Supervisor). The staff included both males and females and deaf and hearing persons. Two had master's degrees; two had bachelor's degrees; two had high school diplomas. All project staff members used sign language; two of them were capable of interpreting in large public gatherings and the others could interpret on a one-to-one basis. About 40 students were in enrollment during this time. Even with this type and number of special staff, many critical needs of the 40 deaf students remained unmet due to inadequate specialized staffing and/or inadequate inservice training of regular staff.

Deaf persons like all other citizens of our Nation, are entitled to services based upon their total needs rather than on the basis of what is needed "just to get by." Rehabilitation centers desiring to serve deaf persons effectively will provide substantial numbers of specialized staff and will initiate services where need demands. A program which adequately serves deaf rehabilitation clients will require ample funding.

Implications for a Comprehensive Rehabilitation Center for the Deaf

The results of this study, combined with other existing information, provides documentation of the need for the establishment of a large, residential comprehensive rehabilitation Center for low achieving, often multiply disabled deaf adults.

Tens of thousands of deaf persons are low achievers, undertrained, and underemployed. Many of them have second and third disabilities. They need the type of services found in the existing large, residential comprehensive rehabilitation centers.

This study showed that while many of the deaf clients referred to the Center made substantial personal, social, vocational, and other gains, the services provided to the majority of them could not be described as highly effective. Most of the deaf persons referred to and enrolled in the project program were low achievers. Many of them were multiply disabled with other physical impairments, character and behavior disorders, or mental retardation or illness. The small number of specialized staff and the addition of a few services to the existing center program were of help but did not adequately meet their needs. These deaf persons needed specialized personnel and service considerations in all phases of the rehabilitation process. While integration with hearing clients during the rehabilitation process seemed to facilitate their personal and social development, the need of these deaf persons to understand and to be understood and to receive services from professional personnel trained to work with them overshadowed the need for intimate daily integration with hearing clients in a minimally adapted ongoing service program.

There is considerable question whether the Hot Springs Rehabilitation Center, and similar facilities, can develop and maintain effective service programs for low achieveing deaf adults. Any attempt to do so should include the following:

1. intensive inservice training for regular staff members who are involved with the deaf;
2. the addition of a substantial number of specialists to serve the deaf;
3. the development of effective personal, social, and work adjustment training and a basic education program;
4. the development of instructional guides, materials, and visual instructional media especially for this deaf population;
5. either reduce the staff-student ratio for regular staff members who serve deaf clients or provide specialized assistance to them; and
6. adequate levels of funding.

These undertakings require a great deal more than minimal adaptations of the existing center operation. They require a high level of administrative support, and they will result in widespread impact on the existing program. Will the existing facilities be willing to expand their expertise in serving several disability groups to yet another one?

Other considerations relating to the feasibility of utilizing existing state facilities is whether they can commit themselves to serving a number of deaf persons from multistate areas. As existing facilities reach capacity, they may be forced to deny services to out-of-state clientele in deference to in-state rehabilitation clients. Also, it should be noted that these facilities are limited in number. Only a handful now exist; they could not begin to meet the apparent need of thousands of deaf persons for comprehensive rehabilitation facility services. Not to be overlooked is the matter of funding. Can state operated facilities support the number of specialized staff needed to serve deaf clients effectively? If tuition charges are substantially raised for deaf students, will state rehabilitation agencies continue to support the programs? Can such programs, on a regional basis, be self-sustaining or will funding from an outside source be needed?

The many questions remaining regarding the feasibility of using existing centers for the deaf, and the number of deaf adults in immediate need of this type service justify the immediate development of plans to construct and operate a separate facility for the deaf. With due consideration of the apparent positive benefits of integration with hearing persons, such a facility might be located adjacent to an ongoing facility with which close working relationshiops would be developed.

CONCLUSIONS

The following major findings resulted from the study:

1. The clientele referred to the Center were largely a "hardcore" group -- low achievers, many of whom were multiply disabled.

2. Staffing and service patterns of the project program were desirable and effective to a degree but they were inadequate for the provision of highly effective services to most of the clientele referred to the Center; the feasibility of providing adequate services to these low achieving, often multiply-disabled individuals in ongoing rehabilitation centers on a permanent, self-sustaining basis was seriously questioned and is open for further research.

3. The Center was totally unprepared to serve deaf clients with serious character and behavior disorders, severe mental retardation, and long term mental illness; specialized psychiatric care from professional persons who were also competent workers with the deaf, and twenty-four hour supervision were unavailable.

4. Communication difficulties, involving lack of "in depth" understanding of the deaf as well as the surface problems of inability to use sign language and finger spelling, permeated the entire service program where regular staff members were involved with deaf students. As a result, deaf clients were short-changed in many of the services they received.

5. Trained professional persons from this region who were also capable of working in a rehabilitation setting with deaf adults were difficult to locate.

6. Evaluation instruments which required upper grade school literacy levels or higher were totally inappropriate for the majority of the project clientele.

7. Several of the clients were in need of a terminal, sheltered, residential but productive living and work setting.

8. Most of the clients discharged from the project program will be in great need of continuous counseling, guidance, and interpreting services from professional persons who can communicate effectively with them.

9. According to members of the Center Policy Committee, the number of deaf clients enrolled at any one time should approximate no more than 10% of the entire student population.

MAJOR RECOMMENDATIONS

The following major recommendations are related directly to the outcomes of this study:

1. Replications of the type study currently underway in Hot Springs (RD-2684-S) should be undertaken to further investigate the overall feasibility of utilizing ongoing comprehensive rehabilitation centers for deaf rehabilitation clients.
2. A residential, comprehensive rehabilitation center for the deaf should be established as a permanent model facility for low achieving, often multiply disabled deaf adults.
3. Means of meeting the need of many severely disabled deaf adults for terminal, residential, but productive and active settings should be intensively explored.
4. Counseling, guidance, and interpreting services should be made available on an organized, permanent basis in metropolitan areas containing large deaf populations.
5. Professional level training programs in the area of rehabilitation work with deaf adults should be established to serve RSA Region VI; training programs should use existing programs for the deaf for internships.
6. Immediate efforts should be undertaken to locate, develop, produce and widely distribute instructional materials, media, and other aids for use with low achieving deaf adults.
7. Periodic follow-up on clients who have been discharged from Center programs should be conducted to further evaluate the effectiveness of the Center program for the deaf and to determine continuing needs of the former clients.
8. Capable deaf persons should be employed in service programs for deaf adults; in positions ranging from program director or coordinator to supportive positions such as counselor-aide.
9. The use of counselor and teacher-aides in comprehensive rehabilitation center programs for deaf adults is highly recommended.
10. Communication between rehabilitation personnel and deaf clients must be assured through the provision of services by specialized staff, or by training regular staff members to the level where they can provide services without communication gaps, or by providing interpreting services (note-taking services for the majority of clients served in this study would be highly inappropriate).

Concluding Comment

The rehabilitation service needs of the clientele in this project and thousands like them have been well documented. Their needs are immediate and critical, and to a large degree current service resources are inappropriate. Vastly improved and expanded rehabilitation services to these deaf adult persons must not await further experimentation and demonstration. Effective programs are needed now.

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